

April 2023

Clearing the Smoke: A Closer Look at Federal Spending and Programs on Wildfire



[2014 Carlton Complex Fire](#) | Photo Source: Washington National Guard

Executive Summary

This report provides a snapshot of federal wildfire appropriations and other spending across the federal government. It is meant as a resource for stakeholders inside and outside government working to understand and improve wildfire management budgeting and reporting. It includes a number of key items:

- A breakdown of recent wildfire spending, including the Biden Administration's most recent budget request;
- An examination of the many programs crisscrossing the bureaucratic landscape; and
- Historical perspective and analyses: we explore wildfire spending and suggest policy options to improve landscape, community, and fiscal resilience.

As a nonpartisan budget watchdog, Taxpayers for Common Sense (TCS) is an advocate for American taxpayers and seeks to reduce the human impact and the opportunity cost of wasteful spending and policy choices.

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I. Introduction

After the severe wildfire season earlier that year, Taxpayers for Common Sense (TCS) released *From the Ashes: Reducing the Harmful Effects and Rising Costs of Western Wildfires* in December 2000. As we noted at the time, taxpayers spent more than \$1 billion and more than 27,000 firefighters risked their lives battling blazes that charred more than 2.2 million acres of National Forest and an additional 5 million acres of other public and private lands that year. Many of the report recommendations still ring true: evaluate the success of fire prevention by measuring the number of high-risk communities protected, instead of acres treated; encourage state and local governments to set regulations requiring homeowners in the wildland urban interface (WUI) to protect their own private property through common sense fire safety practices; increase transparency and accountability; and more.

Two decades later, this report helps unravel the complicated thicket of federal funding and various agencies engaged on wildfire issues, while providing suggestions for increased transparency and reform. As wildfire costs are growing, significant additional resources to the tune of billions of taxpayer dollars have been added to wildfire management, and significant resources will continue to be needed in the future. It is critical that these funds are properly tracked and evaluated to ensure people and property are kept out of harm's way.

TCS believes in avoiding unnecessary, long-term liabilities for taxpayers, cutting wasteful and harmful subsidies, and ending corporate welfare. With increasing taxpayer costs of climate change, federal spending can and must be prioritized toward projects that reduce the costs and risks of disasters. This applies to programs ranging from flood and crop insurance to wildfire spending.

II. The Growing and Evolving Wildfire Threat

Wildfires have become a growing problem made worse by climate change. Over the past three decades, wildfires have burned increasingly larger tracts of grasslands and forests. The Congressional Budget Office (CBO) found that from 2017 to 2021, 8 million acres were burned in the U.S., on average, “more than double the average amount from 1987 to 1991.”¹ The costs associated with wildfires also continue to grow. According to the National Oceanic and Atmospheric Administration (NOAA), the number of billion-dollar wildfire events has doubled from an average of 0.4 per year in the 1990s, with an annual cost of \$1.3 billion, to 0.8 per year over the last 10 years, with an annual cost of \$9.6 billion.²

Federal spending on wildfire has also ballooned. Every year, taxpayers spend billions of dollars preventing and suppressing wildfires, as well as helping communities rebuild after wildfire events. This spending is spread across the federal government, from direct wildfire response and management on federal lands through the U.S. Forest Service (USFS) and Department of the Interior (DOI), to prevention and post-disaster recovery assistance offered through the Federal Emergency Management Agency (FEMA), among others.

Recently, the federal government has increased its financial commitment to wildfire management. The USFS received \$5.5 billion from the Infrastructure Investment and Jobs Act (IIJA)³ and \$5 billion from the Inflation Reduction Act (IRA)⁴ for forest management, planning, and restoration activities. The IIJA also appropriated \$1.5 billion to DOI for wildland fire management, with additional wildfire-related spending in the IRA. This extra funding, on top of annual appropriations, will have a significant impact on fire-prone western states, but billions of dollars alone will not solve the wildfire crisis. A massive influx of new funding without the internal structures and support to distribute, track, and account for its effectiveness will not result in the smart forest and land management

outcomes needed to meet the increasing wildfire threat. Federal agencies are currently ill-equipped to effectively manage the huge influx of funds for wildfire programs, jeopardizing efforts to improve long-term federal wildfire policy and management.

Though pots of money have been earmarked for specific programs, in many cases there has been little detail provided on how funds will be spent. This lack of clarity can lead to the creation of programs and subsidies that are both wasteful and ultimately damage long-term forest health. For example, the IIJA and IRA appropriated billions of dollars for the reduction of hazardous fuels – accumulated live and dead vegetation that present a threat of ignition – on National Forest System (NFS) lands. While USFS’s stated goal for hazardous fuel reduction is to remove “excessive vegetation” to prevent wildfires in areas that would threaten communities or other valuable resources,⁵ there is not wide agreement on what defines excessive vegetation, when removing excessive vegetation is necessary, nor the best methods for hazardous fuel reduction. This has led to a variety of vague projects and

funding initiatives, such as developing a market for wood collected during mechanical thinning, which in some instances may undermine other fire risk reduction efforts.

To improve the effectiveness and interagency coordination of the new funding streams, the IIJA created the Wildland Fire Mitigation and Management Commission. The Commission is tasked with finding ways to better prevent, manage, suppress, and recover from wildfires, but first must corral the herd of wildfire programs and activities with overlapping and duplicative mandates spread out across numerous federal agencies. The Commission could fundamentally shift wildfire spending priorities so mitigation and prevention can effectively reduce the need for ever-growing suppression budgets.

This report will help identify areas for increased coordination and oversight and areas of opportunity and concern for federal agencies, members of the Commission, and federal policymakers as they plot the future course of wildland fire management. We hope it will

RECENT WILDFIRES

Recent fires in California and other parts of the U.S. demonstrate how the costs of wildfires can explode once ignition has occurred. Below are examples of cases where better prevention efforts, planning, and initial response might have reduced impacts. As climate change exacerbates fire conditions, it is important to learn from these experiences to better prioritize federal wildfire spending going forward.

TUBBS FIRE

On the evening of October 8, 2017, a spark from power equipment, combined with strong winds, started a wildfire that quickly moved toward Santa Rosa, CA. The fire, now known as the Tubbs fire, took 22 lives, burned 36,807 acres, and destroyed 5,636 structures. Conditions like severe drought, Diablo winds, and residential development in the WUI made it the most destructive fire at that point in California history, only to be overtaken a year later by the Camp Fire. CoreLogic, a real estate data company, calculated \$5-7 billion in property loss due to the fire. CalFire reported that suppression costs alone totaled \$100 million.

Although the state did not fault Pacific Gas and Electric (PG&E) for causing the fire, PG&E settled the wildfire victim claims for a total of \$13.5 billion to cover the liability for its responsibilities for this fire, the Camp Fire (see below), Butte Fire, and the series of wildfires now known as the 2017 North Bay Fires.

also serve as a resource for non-governmental organizations (NGOs) and the public to better understand federal wildfire spending and programs and improve the connection of federal dollars to on the ground efforts that decrease wildfire risk. It is unavoidably incomplete, as there are many areas where it is impossible to track how federal wildfire appropriations are spent. Our goal is to identify as many of these areas as possible so agencies and policymakers can begin the work of ensuring federal dollars provide the greatest long-term benefit for communities and taxpayers.

III. Federal Spending Throughout the Fire

The work of federal wildfire management never stops; it is ongoing. This is partly because climate change is lengthening fire seasons, but it is also a reflection of the work being done every day to prevent and recover from fires. The federal government has a dizzying array of programs and initiatives spread across numerous agencies. The USFS and DOI may take the lead on suppressing wildfires, but the Departments of Energy (DOE), Commerce, and Defense (DOD) all do wildfire-related work. Unfortunately, the urgency and expense of fighting and extinguishing conflagrations has eclipsed all other activities that help reduce the incidence of these megafires. Once a megafire has started and threatens lives and property, there are few good options available.

Indeed, there are many opportunities throughout the fire life cycle to prevent or mitigate damages to natural resources, property, and lives. The greatest opportunity to prevent and mitigate the negative consequences of wildfire is before the fire has even started. Mitigation activities can save property and lives, as well as tax dollars. A 2019 study by the National Institute of Building Sciences (NIBS) found that every \$1 invested in disaster mitigation grants by federal agencies saves society \$6 or more in post-disaster response.⁶ For wildfire specifically, the study found that every \$1 invested in federal grants for fire mitigation at the WUI provides \$3 in

Every \$1 invested in federal grants for fire mitigation at the WUI provides \$3 in benefits.

—National Institute of Building Sciences

benefits. According to the report, “with a total project cost of approximately \$56 million (inflated to 2016 USD), federally supported mitigation of fire at the wildland-urban interface (WUI) will save society an estimated \$173 million in avoided future losses.” Other opportunities for mitigation, like constructing new buildings and retrofitting existing buildings to meet higher standards, also save money in the long run. The study determined that every \$1 spent to meet stricter building codes in the WUI would save \$2 for existing buildings⁷ and \$4 for new buildings.⁸

There are many opportunities for wildfire prevention that can be specialized to the community being served. Forest management practices to reduce hazardous fuel loads, such as prescribed fires, can minimize the chance of a fire starting in high risks areas, including those near communities. Research into wildfire behavior can help predict when and where wildfires are likely to occur and what their behavior will look like when they do. Early wildfire detection technologies can give forest managers and community leaders information they need to manage wildfires.

When wildfires are deemed dangerous and in need of suppression, established community evacuation protocols and increased coordination between local, state, and federal partners can improve efforts to get people out of harm’s way. FEMA provides federal assistance to states and local communities before and

CAMP FIRE

The Camp Fire, which started on November 8, 2018, would soon become the most deadly and destructive wildfire in California history and the most expensive natural disaster in the world that year. The fire took 85 lives and the economic impact was staggering. According to an analysis by the University of Chicago, the Camp Fire cost approximately \$16.65 billion, the costliest single event of the 2018 California wildfire season, which totaled an estimated \$148.5 billion in damages. The study found that \$27.7 billion came from capital losses, \$32.2 billion in health costs, and \$88.6 billion in indirect losses, with 52% of those indirect losses happening outside the state of California.

The Camp Fire started due to a downed PG&E powerline because the company did not shut down their 115kV transmission line, which requires intensive manual effort, despite the high winds and low humidity warning before November 8th. The California Public Utilities Commission (CPUC) responsible for the infrastructure oversight inspection omitted the section of electrical infrastructure at the origin of the Camp Fire for six years before the fire started. A CPUC investigation after the fire identified multiple violations by PG&E, who failed to properly maintain and monitor its infrastructure. These failures were “not isolated, but rather indicative of an overall pattern of inadequate inspection and maintenance of PG&E’s transmission facilities”, according to the report. Other fire prevention efforts also fell short. In July 2017, a year before the fire, the California State Legislature approved a measure that suspended and repealed a fee on property owners that funds fire prevention efforts.

after natural disasters. The Disaster Relief Fund (DRF) provides funds for the management and control of wildfires and other natural disasters on public and private land.

IV. A Budgetary and Legislative History of Fire

Like most things, understanding the competing priorities and philosophies of wildfire management requires some history. Wildfires and how we respond to them has been an issue for lawmakers for more than a century. People react to experiences, and dramatic events such as destructive wildfires, where livelihoods and property are destroyed, have a lasting influence on public opinion. The challenge for policymakers today is to learn from the ebb and flow of wildfire management of the past and to chart a path forward, so we may succeed where we have historically failed.

A Blank Check and the 10 a.m. Policy

Wildfires have shaped the U.S. Forest Service since its first days. Following the tragic

fires of the late 1800s, Congress passed the Forest Reserve Act of 1891 and authorized the President to set aside national forest reservations to mitigate concern that forest fires threatened future commercial timber and important watersheds.⁹ Congress created USFS in 1905 by transferring 63 million acres of forest reserves to the Department of Agriculture (USDA). In 1908, just three years after establishing USFS, Congress passed the Forest Fires Emergency Funds Act, authorizing USFS to use any available funds necessary for suppression in case of fire emergencies. Congress would later reimburse suppression expenses, giving USFS a “blank check” for emergency fire suppression that was not subject to the regular appropriations process.¹⁰

This blank check was immediately put to the test just two years later, when the Great Fire of 1910, also known as the Big Burn or Big Blowup, roared through the states of Idaho, Montana, and Washington. The fire burned 3 million acres and killed 85 people, making it one of the worst wildfires in U.S. history to date. The USFS spent \$1.1 million (\$1910) on fire suppression

that year,¹¹ and Congress dutifully reimbursed the funds. The 1910 fires convinced forest managers, as well as members of Congress and the public, that total fire suppression was needed to prevent such a fire from occurring again. Three USFS chiefs who served from 1920 to 1938 had all fought the 1910 fires and instituted a policy of total fire suppression.¹² Chief Ferdinand Silcox issued a memo in 1935 establishing the 10 a.m. fire control policy, which called for “thorough suppression of all fires in all locations” and directed all fires be suppressed by 10 a.m. on the day after they are detected.¹³

At the same time, USFS openly opposed the practice of prescribed burning—one forest manager went so far as calling it propaganda that “encouraged incendiarism.”¹⁴ Even as many ranchers, farmers, and silviculturists advocated for prescribed burning for improving land conditions, USFS suppressed research by other agencies, as well as its own scientists, suggesting forests would benefit from prescribed burning.¹⁵

After Congress authorized USFS to offer funds to local districts on state and private lands, USFS refused to fund fire protection districts that allowed prescribed burns. If a state refused to ban prescribed burns, USFS

responded by counting all fires in that state, prescribed or wild, as wildfires, which greatly inflated the total number of burned acres documented in the 1930s. The USFS eventually agreed to provide fire funding to states that allowed prescribed burning in the 1940s and 1950s.¹⁶ And southern states started to join the cooperative program one by one.

Fire Borrowing and a New Outlook

As a result of its embrace of suppression, USFS suppression costs climbed in the 1960s and 1970s as burned acreage decreased. After the Office of Management and Budget (OMB) raised concerns over the return on fire suppression spending, USFS ended the 10 a.m. policy in 1977. Following OMB’s recommendations, Congress repealed the Forest Fires Emergency Act in 1978, putting an end to the eight-decade long blank check law.¹⁷

Instead of suppressing all fires, USFS began to allow more acres to burn and brought suppression costs down. Average annual suppression costs dropped from \$125 million (\$2002) in the mid-1970s to \$61 million from 1977 to 1984.¹⁸ During this time, Congress gave USFS a fixed budget of around \$125 million each year.¹⁹ In years with more expensive fires, USFS drew on its reforestation fund, and then

WOOLSEY FIRE

The same day as the Camp Fire ignited, another fire was reported in Ventura County, California. Fueled by fast-moving winds and dry conditions, the fire quickly spread out of control, and by the next morning had crossed a major highway and was burning toward the Pacific Ocean and the city of Malibu. Three people would lose their lives in the fire and approximately 1,500 structures would burn in Los Angeles and Ventura counties. It is the costliest fire in the history of Malibu, with property worth at least \$1.6 billion destroyed in Malibu alone. The fire cost approximately \$6 billion in total damages, according to CoreLogic in a report completed in conjunction with the CPUC.

The Southern California Edison utility was found to be at fault for the fire, violating numerous fire safety codes including ones pertaining to the construction of their wires and poles – they were too close together, making them susceptible to fall – and failing to adhere to rules to maintenance of vegetation surrounding their equipment.

paid itself back during less costly years.²⁰ For the first decade after the repeal of the blank check, the annual appropriated amount for fire suppression covered suppression expenditures.

This new system was short-lived. In the late 1980s, several severe fires broke out, forcing USFS to borrow \$422 million from its revolving funds to cover suppression costs.²¹ Although Congress repealed the Forest Fires Emergency Act in 1978, it then passed the Fiscal Year (FY) 89 Interior appropriations law (P.L. 100-371), which would once again grant USFS the authority to transfer funds for firefighting purposes. Since then, authority to transfer funds for Wildland Fire Management (WFM) related activities is granted to DOI and USFS annually in the Interior, Environment, and Related Agencies appropriations acts.²² This authority has led to the practice of fire borrowing that has persisted ever since.

During this same period, a new movement began to emerge as more research uncovered

the ecological role of wildfires. A growing body of literature showed the benefits of wildfires in creating habitats, revitalizing vegetation, reducing fuels, and preventing high-intensity wildfires.²³ The USFS began adopting a let-it-burn policy in some national parks, which allowed fires to burn unless they threatened property, resources, or human lives. The USFS also started implementing prescribed burns as part of the agency's fire management policy.

However, this too was short-lived, after the 1978 Ouzel Fire in Rocky Mountain National Park in Colorado came dangerously close to a community. As a result, the let-it-burn policy was suspended in Rocky Mountain National Park. Ten years later, the 1988 Yellowstone Fires, which burned 1.5 million acres, attracted national interest, and swung public opinion back in favor of suppression. Congress, the media, and the public questioned if the wildland fire use policy allowed fire to destroy America's national parks, and public outcry forced yet another reevaluation of fire policy. Forest



managers were mandated to create fire plans for all federal forest lands, and all fires were to be suppressed until fire plans were in place.²⁴

Following the Yellowstone Fires, Congress tripled the USFS suppression appropriation to \$375 million in 1989.²⁵ Even this increased funding was not sufficient to cover the agency's suppression deficit, and USFS was at risk of depleting its reforestation fund. In 1990, Congress gave USFS \$280 million to repay the fund, once again, through supplemental appropriations, repeating the pattern of emergency fire suppression reimbursement.

Wildland Fire Management Policy and Program Review

In 1994, the South Canyon Fire in Colorado triggered a review of wildfire policy following the death of 14 firefighters. The Federal Wildland Fire Management Policy and Program

Review of 1995 recognized that federal agencies must adopt land management practices that “integrate fire as an essential ecosystem process.” The 1995 policy review proposed that wildland fire shall be used to protect, maintain, and enhance resources and, as much as possible, be allowed to fulfill in its natural ecological role and federal agencies shall take action consistent with approved Fire Management Plans. The 1995 policy review also listed hazardous fuel buildup that resulted from nearly a century of fire suppression as one of the main causes for higher-intensity wildfires and called for strategic and collaborative landscape-scale fuel management and fire use planning to integrate mechanical, chemical, biological, manual, and fire-use treatments.

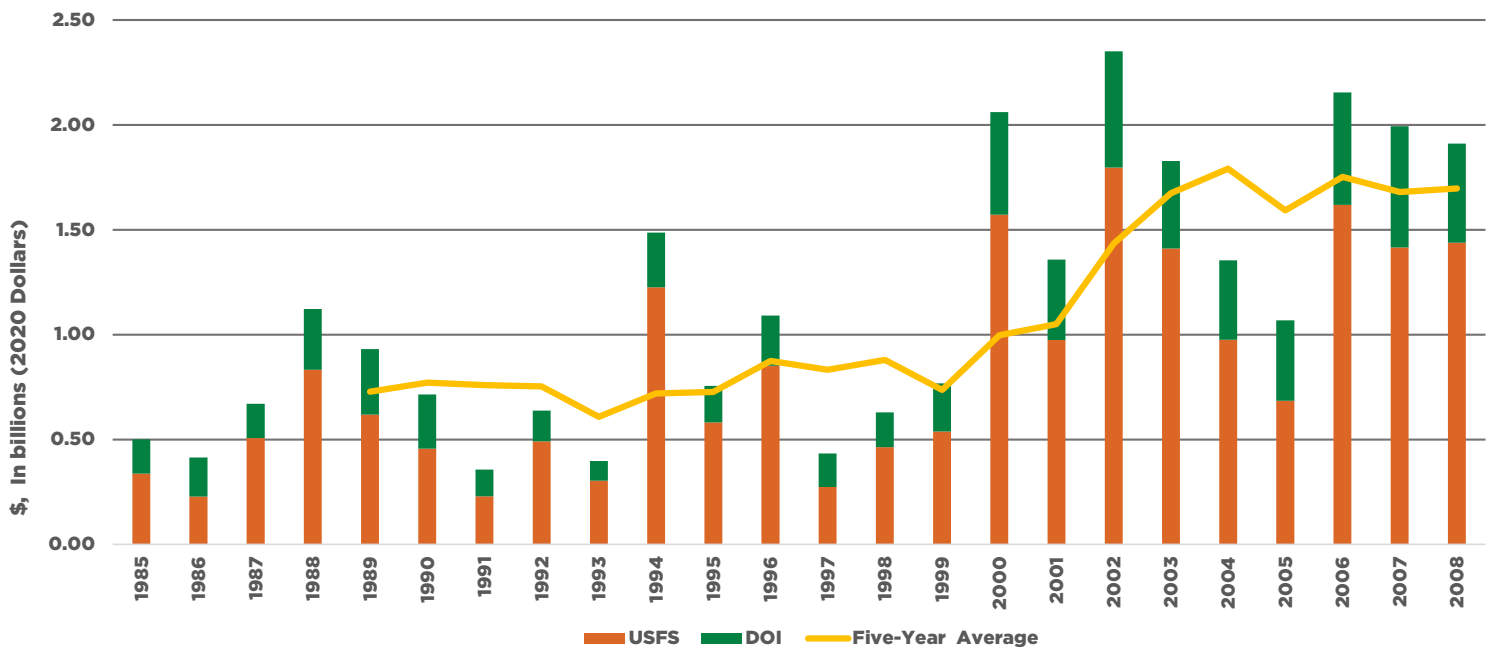
The 1995 policy review was also one of the first government reports to identify the challenges associated with the WUI.²⁶ According to the review, the public did not adequately perceive risk from wildfire in the WUI and property

WILDLAND URBAN INTERFACE (WUI)

As early as 1995, the Federal Wildland Fire Management Policy and Program Review identified the challenges associated with the WUI - where houses and other development meet or mix with undeveloped natural areas. According to the review, the public did not adequately perceive risk from wildfire in the WUI and had little interest in WUI protection unless a catastrophic event occurs. Property owners believed that insurance companies or disaster assistance would always be able to cover losses, which further increases damage potential of a catastrophic wildfire event. And even insurance rating criteria do not reflect WUI protection needs at certain risk locations. Meanwhile, the WUI continues to expand rapidly. A USFS study found that over the past three decades, WUI area totaled 179,000 km², an area similar in size to Washington State and now encompasses more than 44 million homes, or almost one-third of all housing.

When the federal government underwrites disaster insurance it can create a moral hazard and have the unintended effect of encouraging risky and even dangerous development. The National Flood Insurance Program (NFIP) has a long history of artificially subsidizing development in flood-prone areas, creating liabilities for taxpayers and putting people in harm's way. Furthermore, requiring flood insurance purchase in only the highest risk areas leads individuals to believe that it is not required in medium risk areas that are often affected by flooding. Since private homeowner's insurance typically does not cover floods, these individuals are left with significantly smaller disaster assistance. While homeowners' insurance does cover fire, large disaster payouts create market signals that the federal government will rescue or reimburse homeowners from all wildfires, creating the viscous cycle of encouraging risky development and the associated taxpayer liabilities of protecting it from disaster.

Figure 1: USFS and DOI Wildfire Suppression Costs



Source: Congressional Budget Office (CBO) Wildfires Report, June 2022. www.cbo.gov/publication/57970

owners believed insurance companies or disaster assistance would always be able to cover losses. The review acknowledged that while the federal government has limited mechanisms to encourage incentives to property owners on a local level, federal agencies did have a role to play in firefighting, hazardous fuel reduction, cooperative prevention, education, and technical assistance.²⁷

One of the reforms proposed in the 1995 review was to create fire management plans for every burnable acre of National Forest. Unfortunately, USFS has failed to implement most of these reforms. In our 2000 report *From the Ashes*, we noted that, as of March 2000, fewer than 5% of all national forests had written a fire management plan. Even as USFS recognized that many fires should be allowed to burn within limits, it continued to expend vast human and physical resources trying to extinguish almost all wildfires.²⁸

FLAME Account

Following the 2000 wildfire season, President Clinton directed the Secretaries of Agriculture and Interior to develop an improved strategy to manage and reduce the impact of wildland fires. The resulting report, often referred to as the National Fire Plan (NFP), aligned with the 1995 policy review by warning that severe wildland fires and associated suppression costs would increase if methods like fuels reduction projects were not implemented.

Despite the continued effort to balance wildfire response, USFS and DOI suppression costs surpassed \$1 billion and rapidly approached \$2 billion by the early 2000s. As the agencies depleted their suppression accounts, they once again resorted to transferring funds from other discretionary accounts as well as from mandatory and permanent funding accounts and trust funds. This practice, known as fire borrowing, became more problematic and controversial in the 2000s as wildfire spending soared.

As suppression costs continued to drain the USFS budget, Congress passed the Federal Land Assistance, Management, and Enhancement (FLAME) Act of 2009, which established a FLAME account to serve as reserve funds to cover the costs of catastrophic fires or when WFM accounts are exhausted. The FLAME Act also called for a National Cohesive Wildland Fire Management Strategy (Cohesive Strategy) focused on restoring resilient landscapes, creating fire-adapted communities, and safe, effective wildfire response.

Nevertheless, four of the seven years after the FLAME account went into effect, USFS exhausted its FLAME account, forcing it to transfer funds from other accounts.²⁹ The DOI's experience was only slightly better. Ultimately, the FLAME approach did nothing to incentivize cost containment of wildfire suppression nor prevent the need for future budget transfers or supplemental appropriations.

Wildfire Suppression Operations Reserve Fund

For decades, fire borrowing drained agency budgets and compromised other important

outdoor, recreational, and forest management programs such as watershed management, infrastructure repairs, and forest treatment projects. It is disruptive to non-fire operations and creates uncertainty about the availability of funds and disrupts program implementation, especially when programs are “time sensitive and may be adversely impacted.”³⁰ Most importantly, fire borrowing perpetuates a vicious cycle in wildfire suppression, diverting resources meant for wildfire prevention and risk mitigation, leading to potentially steeper future suppression costs.³¹

To end the ongoing cycle of deficit spending and wildfire borrowing, Congress passed the Wildfire Suppression Funding and Forest Management Activities Act³² in 2018 to provide additional federal funds for urgent wildfire suppression activities. It passed on the heels of the worst wildfire season in decades, with 80 fires including the Camp Fire in Paradise, California. Praised by both sides of the political aisle as the “wildfire fix,” the bill established the Wildfire Suppression Operations Reserve Fund (Reserve Fund) for use during extreme wildfire seasons.

Use of the Reserve Fund, also referred to as



the wildfire suppression cap adjustment, is permitted as long as a base level of funding for wildfire suppression operations is funded in the underlying appropriations bill. The base level is defined as, and frozen at, the average cost over 10 years for wildfire suppression operations, as requested in the President's FY15 Budget. The base amounts have been determined to be \$1.01 billion for USFS and \$384 million for DOI.

The Reserve Fund was first available in FY20, to be funded at a maximum of \$2.25 billion, with the annual maximum funding level increasing by \$100 million every fiscal year until FY27. In the four years the account has been funded, FY20 - FY23, Congress has appropriated the maximum amount, with roughly 87% of annual funding allocated to USFS and the remaining 13% to DOI. Funds in the Reserve Fund may only be transferred to USFS or DOI for emergency suppression activities once suppression funding under the respective WFM account is exhausted. (The Secretary must notify Congress if all WFM suppression resources are set to be obligated within 30 days).³³ Unobligated balances of funding in the Reserve Fund carry forward to the next year.³⁴

V. The Wildfire Funding Fix(ed?)

The 2018 wildfire fix helped stabilize agency budgets and limit wildfire borrowing by

providing USFS with the financial flexibility to accommodate soaring suppression costs. Unfortunately, it also reaffirmed the government's prioritization of fire control. The wildfire funding fix did not prohibit USFS's transfer authority or address the perverse incentive to suppress fire at any cost. Any appropriations or funds available to USFS may still be transferred to the WFM accounts for forest firefighting, including preparedness, or for emergency rehabilitation of burned-over or damaged lands or waters under its jurisdiction.

The wildfire funding fix was also introduced in part to bypass procedural and budgetary caps on discretionary spending under the Budget Control Act of 2011 (BCA). Under the BCA, defense and non-defense discretionary funds were subject to hard caps (with some exceptions) for a ten-year period. Although Congress effectively amended the caps each year, it was neither predictable nor consistent, which prompted lawmakers to enact the wildfire funding fix to put wildfire spending outside of discretionary spending limits. It is still too early to know if the wildfire funding fix really fixed the fire borrowing issue, or if it helps control ever-increasing suppression costs. The USFS and DOI have withdrawn funds from the Reserve Fund. Any withdrawals should be closely monitored, and emergency supplemental appropriations must be tracked to analyze the funding fix's

CATEGORICAL EXCLUSION

The wildfire funding fix also included several new exemptions from environmental reviews required under the National Environmental Policy Act (NEPA) and the Endangered Species Act. The legislation allows for categorical exclusions (CEs) for projects up to 3,000 acres for Wildfire Resilience Projects, or hazardous fuels removal projects. But circumventing public participation through categorical exclusions may instead result in a bias toward certain types of management actions, such as timber sales. Allowing forest management decisions to be made 3,000 acres at a time may also fail to meet forest-wide management needs that reduce wildfire risk.

CEs may also be prone to abuse. USFS recently approved the construction of a large, privately owned recreational facility - Holland Lake Lodge - in Montana under categorical exclusion. Despite public concerns about the impact on surrounding areas as critical habitat, USFS and POWDR, the facility owner, were able to proceed with the facility expansion plan.

effect on federal suppression spending.

Furthermore, while the legislation required reports on transfers from the Reserve Fund be submitted to Congress and made available to the public, the legislation does not stipulate how to make the reports public, and they do not appear to be readily available. The DRF is like the Reserve Fund, and FEMA is required to publish reports on the fund on the agency’s website by the 5th of every month.³⁵ These reports must include a summary of the funding and tables detailing DRF expenditures by state and event, among other data. Requiring online reporting of this type for the Reserve Fund on even a semi-annual basis would be beneficial for the public and policymakers.

This transparency would also inform other budgeting decisions. Currently, all WFM suppression accounts must be funded at a level based on FY15-related averages. This should be updated based on more recent data. Finally, at least part of the rationale for creating the off-budget reserve fund was to avoid it counting against the non-defense discretionary spending caps under the BCA. Considering the BCA expired a few years ago, it makes sense to reevaluate the budgetary structure of the fire fix.

The history of federal wildfire management,

from the earliest days of USFS through the wildfire funding fix, illustrates the tension between the demands of wildfire suppression and prevention. At different points during the past century, in recognition of this tension, reviews and strategies have attempted to elevate or insulate prevention and mitigation activities. Most recently, Congress passed two bills including significant new resources for non-suppression activities that seemed to finally recognize this need for a more balanced approach.

VI. Recent Wildfire Spending & Initiatives

Infrastructure Investment and Jobs Act

The IJJA, also referred to as the Bipartisan Infrastructure Law, was signed into law by President Biden on November 15, 2021. For FY22 through FY26, the IJJA appropriates more than \$7.3 billion to USFS and DOI – \$5 billion and \$2.3 billion, respectively – for various existing and new wildfire risk mitigation and ecosystem restoration programs. The IJJA also established new programs and provided additional funding for existing programs related to wildfire outside USFS and DOI, within DOE, the Department of Transportation (DOT), and NOAA.

The chart below includes some, but not all, of the IJJA appropriations related to wildfire.

Figure 2: Wildfire-Related Spending in the Infrastructure Investment and Jobs Act

Agency	Program	Appropriations (\$, Millions)
DOE	Grid Innovation Program	5,000
	Grid Resilience Utility and Industry Grants	2,500
	Smart Grid Investment Grant Program	3,000
DOI	Burned Area Rehabilitation	225
	DOI Wildland Fire Management Account	178
	Radio Technology/Infrastructure	10
	Slip-On Tanker Units Pilot Program	50
	State/Tribal Ecosystem Restoration Projects on Private/Public Land	400
	Working Capital Fund to Fund Restore Ecological Health Contracts - Fed/Tribal Land	100

DOT	Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Grants	1,400
	Repairs On Federal Roads Damaged by Natural Disasters	600
NOAA	Observation and Dissemination Infrastructure for Wildfires	50
	Research Supercomputing Infrastructure for Weather and Climate Model Development	80
	Wildfire Research Operations	50
USDA	Burned Area Recovery	225
	Collaborative Forest Landscape Restoration Program	100
	Collaborative Restoration of Water Quality/Fish Passage	80
	Ecosystem Restoration Projects Byproducts Use	400
	Firewood Banks Feedstock and Financial Assistance	8
	Hazardous Fuels	514
	Hazardous Fuels Treatment and Wildfire Data Display	20
	Map Depicting At-Risk Communities	1
	State Fire Assistance (National Fire Capacity)	88
	Rental Programs to Limit Stream Bed Disturbance	50
	Reverse-911 Telecommunication Systems	30
	Roads For Wildfire Risk Reduction Projects	100
	Volunteer Fire Assistance (Rural Fire Capacity)	20
	Wildfire Defense Grants to At-Risk Communities*	1,000
USDA & DOI	Biochar/Innovative Wood Products	200
	Control Locations & Shaded Fuel Breaks	500
	Harden Recreation Sites on Federal Land	100
	Invasive Species Detection	200
	Joint Fire Science Program	20
	Mechanical/Precommercial Thinning and Timber Harvest	500
	Mine Land Restoration/Mitigation	200
	National Revegetation Effort	200
	Planning and Conducting Prescribed Fires	500
	Post-Fire (<3 Yr. After) Restoration Activities	200
	Preplanning Fire Response Workshops/ Workforce Training for Nonfederal Firefighters	100
	Restore Ecological Health Contracts - Fed/Tribal Land	200
	Salaries/Expenses of Federal Wildland Firefighters	600
	State/Tribal Restoration Projects on Federal Land (Good Neighbor Agreements)	200
Wildfire Detection and Monitoring Equipment	10	
Wildfire Detection Program with NOAA	20	
Total		20,029

Notes: Programs highlighted in this chart are authorized in Sections 11106, 11405, 40101, 40103, 40803 (Wildfire Risk Mitigation), and 40804 (Ecosystem Restoration), in addition to several line items specified under DOI, NOAA, and USDA within Division J Appropriations. This chart will likely expand as more information is released on IJA programs. Please note that appropriated funds are not evenly distributed throughout the 5-year period.

This chart only includes discretionary appropriations. The REPLANT act, passed as part of IJA removed the \$30 million cap for the Reforestation Trust Fund which receives revenue is from tariffs on imported timber and wood products. Removing the cap diverts \$528 million from the general treasury into the trust fund.

*This program appropriated \$500 million through Section 40803 and is appropriated an additional \$500 million in Division J, totaling in \$1 billion in appropriations for FY22 through FY26.

Inflation Reduction Act

The FY22 budget reconciliation bill, commonly known as the IRA, included \$369 billion in climate related spending. It appropriated \$1.8 billion to USFS for hazardous fuels reduction projects and \$3.2 billion for other USFS activities that directly or indirectly address wildfire, such as vegetation management, which will remain available until September 30, 2031.

Other agencies that received wildfire-related funding include National Park Service (NPS), Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), Natural Resources Conservation Service (NRCS), Environmental Protection Agency (EPA), Fish and Wildlife Service (FWS), and NOAA.

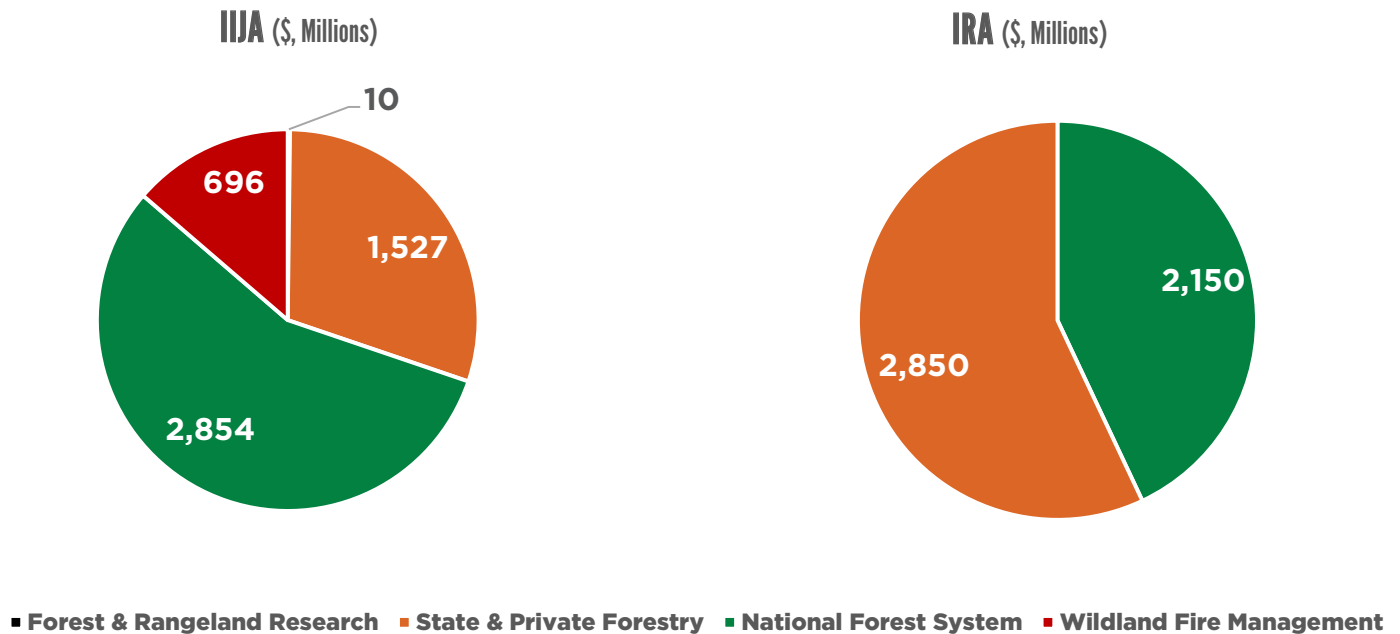
The chart below includes some, but not all, of the IRA appropriations related to wildfire.

Figure 3: Wildfire-Related Spending in the Inflation Reduction Act

Agency	Program	Appropriations (\$, Millions)	Available Until
USFS	Hazardous Fuels Reduction Projects	1,800	FY2031
USFS	Vegetation Management Projects	200	FY2031
USFS	To Provide for Environmental Reviews	100	FY2031
USFS	Old-Growth Forest Protection	50	FY2031
USFS	Non-Federal Forest Landowners Forest Resilience Grants	400	FY2031
USFS	Non-Federal Landowners Carbon Sequestration Grants	50	FY2031
USFS	Wood Innovation Grants	100	FY2031
USFS	Forest Legacy Program Grants for Land Acquisition	700	FY2031
USFS	Tree Planting Through Urban and Community Forestry Assistance Program	1,500	FY2031
USFS	National Forest Service Administrative Costs	100	FY2031
NPS & BLM	National Parks Conservation and Resilience	250	FY2031
NPS & BLM	National Parks Conservation and Ecosystem Restoration	250	FY2031
BIA	Tribal Climate Resilience and Adaptation Programs	220	FY2031
NRCS	Conservation Technical Assistance	1,000	FY2031
EPA	Environmental Justice Grants	3,000	FY2026
FWS	Funding to Address Weather Events	125	FY2026
NOAA	Oceanic and Atmospheric Research and Forecasting for Weather and Climate	150	FY2026
NOAA	Computing Capacity and Research for Weather, Oceans, and Climate	190	FY2026
Total			\$10,185

Notes: Programs highlighted in this chart were selected based on review of the IRA text and other independent analyses of the legislation, including those classified as wildfire spending by the Federation for American Scientists and Resources for the Future. All USFS discretionary funding is listed. This chart will likely expand as more information is released on IRA programs.

Figure 4: IIJA and IRA Forest Service Appropriations



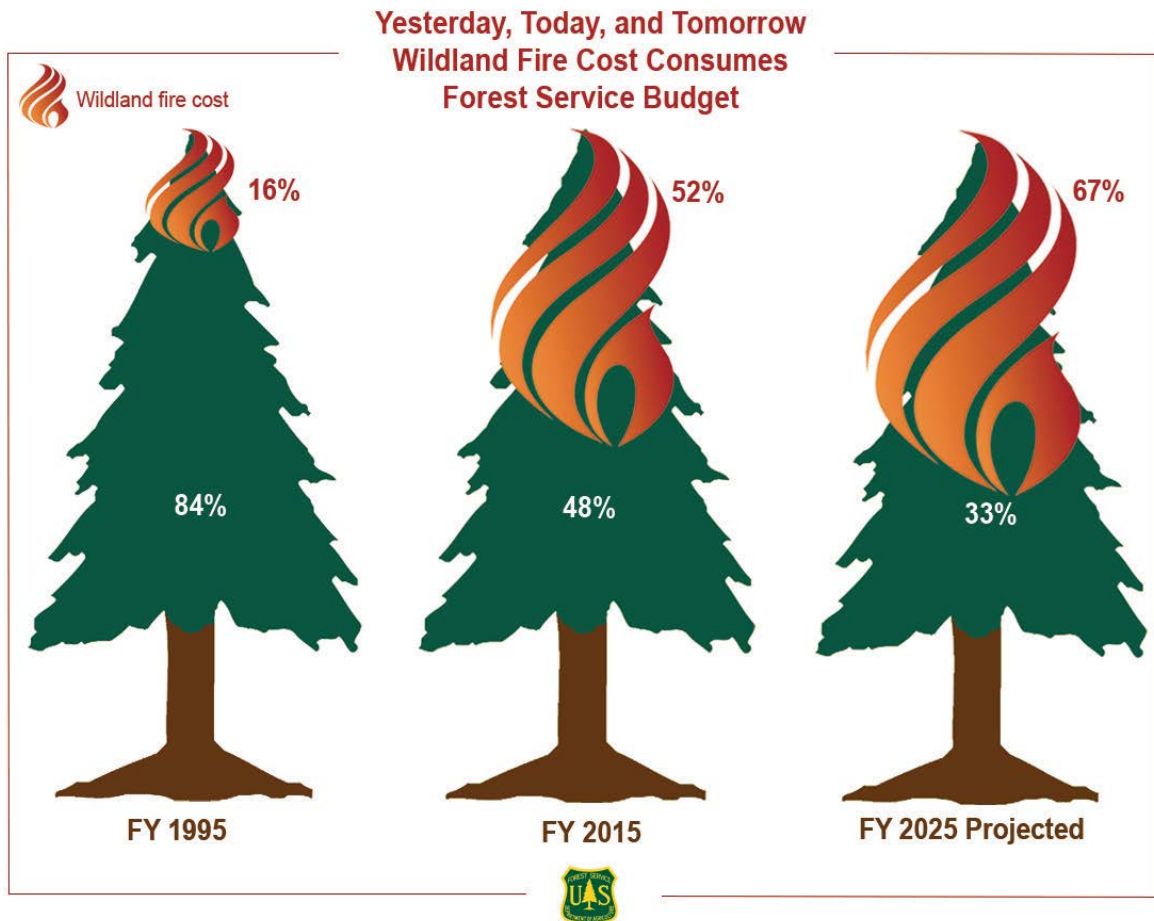
IIJA and IRA Impact on Forest Service Budget

As previously discussed, decades of fire borrowing have diverted funding and resources away from the very same programs that prevent or lessen the impacts and costs of future wildfire. Even when Congress replenishes funds through supplemental appropriations, fire borrowing is still extremely problematic as it disrupts seasonal work and delays time-sensitive projects. The IIJA and IRA may help to reduce fire borrowing, as together they provide USFS \$10.5 billion, mostly for the National Forest System and State and Private Forestry accounts.

The USFS’s own analysis found that as wildfire costs increased as a percentage of the agency’s budget due to longer and more costly fires over the last few decades, funding for non-fire programs has failed to keep pace with the increased cost of fire suppression.³⁶ The growth in fire suppression costs has consumed

an ever-increasing portion of the agency’s appropriations. And non-fire programs’ appropriations were often reduced by the amount that the suppression budget increased, forcing the agency to forego opportunities to complete vital restoration work that could improve forest health and resilience and mitigate future fire potential. The USFS found that from 1995 to 2015, the WFM and Reserve Fund more than tripled in its percentage of the agency budget from 16% to 52%, while National Forest System funding fell by nearly one-third.³⁷ USFS projected the continued growth of WFM through 2025 will climb to nearly \$1.8 billion, or roughly two-thirds of the entire USFS budget, accompanied by a nearly \$700 million decrease in non-fire program funding in the next 10 years. (See USFS graphics below.)

Figure 5: The Cost of Wildland Fire (Preparedness, Suppression, FLAME, and related programs) as a Percentage of the Forest Service’s Annual Budget



Source: USFS, The Rising Cost of Fire Operations: Effects on the Forest Service’s Non-Fire Work, August 2015. <https://www.fs.usda.gov/sites/default/files/2015-Fire-Budget-Report.pdf>

Before the IIJA funding, the USFS WFM account and Reserve Fund together accounted for roughly half of all USFS appropriations. By increasing funding for non-suppression accounts, IIJA funding brought this percentage down to 43% in FY22, the first time in 10 years suppression has accounted for less than half of the agency’s total budget.

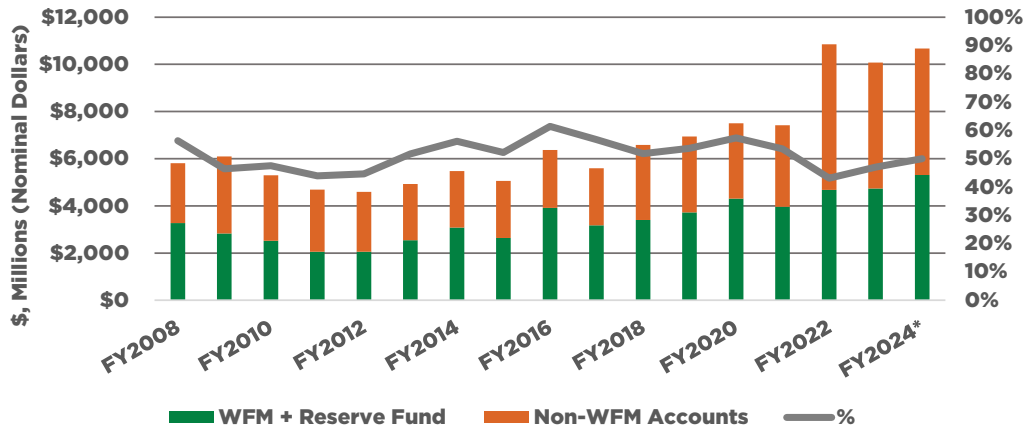
The new funding from the IIJA through FY26 and from the IRA through FY31 will temporarily balance wildland fire management, forest management, conservation, recreation, or

other functions that facilitate the multiple use principle of USFS. However, although the IIJA and IRA improved the overall budget structure and heavily invested in ecosystem restoration and wildfire risk mitigation projects, continued monitoring and agency spending transparency will be needed to evaluate how effective this \$10.5 billion USFS wildfire spending plan will be.

The FY24 President’s Budget Request

On March 9, 2023, the President announced his

Figure 6: WFM and Reserve Fund as a Percentage of USFS Budget



Source: Congressional Research Service (CRS) Forest Service Appropriations Tables, FY2024 USFS Budget Justification
 Notes: All fiscal years include regular as well as emergency supplemental appropriations. FY2022, FY2023, FY2024 totals include IIJA funding.
 *FY2024 total represents the President’s Budget Request, not enacted appropriations.

budget for Fiscal Year 2024. The USFS’s budget request for FY24 brings the spending trend back to pre-IIJA levels. While all other accounts remained relatively flat, the increase in the WFM account brings the WFM and Reserve Fund’s combined portion of the USFS budget back to 50%. About half of the WFM increase will be devoted to firefighter pay reforms, but the other half of the increase will be used for increasing firefighter capacity for suppression.

The President’s FY24 budget request would also increase wildfire funding at DOI. The budget calls for an increase of \$156.8 million, 11%, to the WFM account over FY23 total appropriations.

Like the USFS request, much of this increase will be devoted to firefighter pay reforms and used to expand firefighter capacity - \$72 million and \$45 million, respectively.³⁸ The budget also requests \$350 million for the DOI Reserve Fund, an increase of \$10 million. This, combined with the USFS Reserve Fund request, is the maximum allowed increase for this fiscal year.

Additionally, the DOI FY24 budget request includes legislative proposals to expand the Good Neighbor and Stewardship Contracting authorities currently available to BLM within DOI and to FWS and NPS. These contracts enable agencies to use the value of timber or

Figure 7: FY2024 USFS Budget Request (\$, Millions)

Account	FY2018	FY2019	FY2020	FY2021	FY2022*	FY2023*	FY2024 Budget Request*
Forest Service Operation (FSO)				\$1,026.2	\$1,174.1	\$1,152.7	\$1,316.5
Forest and Rangeland Research (FRR)	\$297.0	\$301.0	\$308.0	\$258.8	\$323.6	\$311.3	\$351.1
State and Private Forestry (SPF)	\$337.1	\$347.5	\$347.0	\$261.4	\$670.6	\$791.2	\$633.1
National Forest System (NFS)	\$1,944.4	\$2,023.0	\$1,991.5	\$1,786.9	\$3,311.3	\$2,714.2	\$2,756.1
Capital Improvement and Maintenance (CIM)	\$525.6	\$467.0	\$466.8	\$125.4	\$686.0	\$364.0	\$307.0
Wildland Fire Management (WFM) + Reserve Fund	\$3,406.8	\$3,725.3	\$4,307.6	\$3,967.2	\$4,677.3	\$4,738.0	\$5,306.6
Land Acquisition (LA)		\$72.6	\$76.9	-\$5.6			\$0.8
Other	\$5.7	\$5.1	\$6.4	\$3.7	\$3.7	\$3.7	\$4.9
Forest Service Total	\$6,580.9	\$6,941.5	\$7,504.2	\$7,424.0	\$10,846.6	\$10,075.1	\$10,676.1
Forest Service WFM+Reserve Fund %	52%	54%	57%	53%	43%	47%	50%

Source: CRS Forest Service Appropriations Tables, FY2024 USFS Budget Justification
 Notes: In FY2021, USFS made some structural changes to their budget, creating a Forest Service Operations (FSO) account that funds “certain fixed costs and administrative expenses related to facilities maintenance and leasing, information technology, and other agency-wide organizational services.” In addition to the new FSO account, USFS added a new line item for salaries and expenses in all its accounts including the FSO, FRR, SPF, NFS, and WFM.

*FY2022, FY2023, FY2024 totals include IIJA funding. All fiscal years include regular as well as emergency supplemental appropriations.

other forest products removed from the federal lands as an offset against the cost of land and resource management services provided by private parties or contractors through the agreements. The DOI FY24 budget also proposes appropriations language to extend the current Good Neighbor Authority for BLM and USFS by 1 year; it currently expires at the end of FY23.

Implementing Funding - Wildfire Crisis Strategy

Following the catastrophic western fires in recent years, USFS announced a new 10-year Wildfire Crisis Strategy in January 2022. This 10-year Wildfire Crisis Strategy aligns with and builds upon previous wildfire strategies, including the National Fire Plan and the National Cohesive Wildland Fire Management Strategy. The Strategy identifies numerous factors that contribute to the growing wildfire crisis, including fuel buildup, global warming, and expanding development of the WUI. The Strategy set a 10-year goal of treating up to an additional 50 million acres on high-risk fire sheds with the plan to focus on 250 fire sheds on NFS lands that present the highest risk to communities and critical infrastructure.

The USFS has identified 21 areas in the Western U.S. as “priority landscapes” as part of its Wildfire Strategy. The area selected to date includes slightly more than 43.2 million acres. The U.S. plans to invest \$884.58 million from FY22-FY24 in these landscapes. More specific funding information and specific plans for each landscape can be found in the Appendix.

Implementing Funding - Wildland Fire Mitigation and Management Commission

The IJA also established the Wildland Fire Mitigation and Management Commission, which is chaired by USDA, DOI, and FEMA, and consists of other federal agencies, state, local, and tribal governments, as well as the private sector. The commission is tasked with forming federal policy recommendations and strategies to “better prevent, manage, suppress and recover from wildfires, and provide recommendations for aerial firefighting equipment needs.”³⁹ It is meant to build on existing interagency efforts and continue to pursue an all-of-government approach to wildfire risk reduction and resilience. So far, the commission released a report on Aerial and Equipment Strategy in January 2023⁴⁰ and is expected to issue other recommendations by priority topic areas by September 2023.

Figure 8: FY2024 DOI WFM Budget Request (\$, Millions)

Account	FY2018	FY2019	FY2020	FY2021	FY2022*	FY2023*	FY2024 Budget Request*
WFM Preparedness	\$332.8	\$322.2	\$332.8	\$347.1	\$446.5	\$469.4	\$592.5
WFM Suppression	\$439.4	\$388.1	\$383.7	\$383.7	\$383.7	\$458.7	\$383.7
WFM Fuels Management	\$184.0	\$189.0	\$194.0	\$220.0	\$534.6	\$403.4	\$328.9
WFM Other/Unallocated	\$41.9	\$41.9	\$41.9	\$41.9	\$169.0	\$98.9	\$283.5
Reserve Fund	\$0.0	\$0.0	\$300.0	\$310.0	\$330.0	\$340.0	\$350.0
Total	\$998.1	\$941.2	\$1,252.3	\$1,302.6	\$1,863.7	\$1,770.4	\$1,938.5

Source: CRS Wildfire Appropriations Tables, FY2024 DOI Budget Justification.

Notes: *FY2022, FY2023, FY2024 totals include IJA funding. All fiscal years include regular as well as emergency supplemental appropriations.

WILDFIRE POLICY REVIEW(S)

In 1994, the South Canyon Fire in Colorado triggered a joint review of wildfire policy that resulted in the Federal Wildland Fire Management Policy and Program Review of 1995. Following the 2000 fire season, USFS came out with the National Fire Plan and a 10-Year Strategy and Implementation Plan, which was quickly abandoned after the new Bush Administration announced the Healthy Forest Initiative and the passage of the Healthy Forests Restoration Act of 2003. Another review of wildfire policy led to the National Cohesive Wildland Fire Management Strategy (Cohesive Strategy) that came out in 2014. All wildfire strategies called for restoration of forest health and landscape resilience, reduction of wildfire risk to properties, communities, and infrastructure, and safe, effective firefighting. The 10-year Wildfire Crisis Strategy laid out plans similar to previous wildfire strategies, even as wildfire costs and suppression costs have only continued to increase.

VII. Taxpayer Tools to Tackle Wildfire

Cost effective, equitable solutions exist, and the federal government should lead the way.

Decades of fire management practices focused on suppression and commercial timber harvest have cost taxpayers billions of dollars, turned our national forests into a tinderbox, and left communities at risk. The good news is billions of dollars are now available to address the wildfire crisis and can be used in ways that can achieve real and lasting results.

The following areas should be priorities for spending. Focusing on these Taxpayer Tools to Tackle Wildfire can help ensure taxpayer dollars are invested in solutions to protect communities, build more resilient landscapes, and save costs now and in the future. These tools are meant to spotlight areas for reform based on the discussion above and the individual agency factsheets that follow. There is no one-size-fits all policy solution, but a more balanced approach emphasizing fire prevention will save taxpayer money and protect people and property.

Taxpayer Tool: Transparency & Accountability in Spending Decisions and Programmatic Focus

Federal spending information – and the decisions leading to that spending – should be accessible and comprehensive, across all federal

agencies. With an influx of wildfire spending authorized by Congress in recent legislation (IIJA and IRA), as well as the overall growth of wildfire spending, information on taxpayer spending and the related impacts must be publicly available in an easily accessible, understandable format.

The IIJA requires the Secretaries of Agriculture and Interior to develop a 5-year monitoring, maintenance, and treatment plan and strategy, but there's still little detail about how activities funded in the IIJA—fuel treatment, risk reduction, restoration, etc.—will be evaluated in a results-oriented way. The Office of Inspector General (OIG) under USDA published their oversight plan for IIJA funding in 2022,⁴¹ which could provide more insight into what specific projects are getting funded. What's also concerning is that many wildfire-related appropriations included in the IRA, like the \$1.8 billion hazardous fuel reduction projects, do not come with provisions for effectiveness monitoring.

The factsheets that follow in this report detail the many agencies and programs across the federal government that make up the federal wildfire management program. The organization and budgeting of many of these programs have also changed over time, making it difficult to track where wildfire management dollars are going.⁴² While priority setting for federal spending has been an issue raised in numerous

reviews and strategies over time, answering even basic questions about the overall mix of wildfire spending is a challenge. For example, it was not possible, during this study, to calculate total suppression spending versus mitigation spending, as accounts and activities across agencies overlap or are difficult to categorize at even the most basic level.

The lack of a standard definition for what activities and accounts constitute federal wildfire spending – an inconsistency that exists among nongovernmental and governmental sources alike – creates an additional challenge in presenting a comprehensive image of federal wildfire spending. But opportunities still exist for the federal government to increase cross-department tracking and accounting. Developing budget crosscuts will also help identify federal spending trends over time. For example, the National Invasive Species Council (NISC) report, published by DOI, compiled a crosscut budget that created standard program categorizations across agencies to better compare and tabulate overall spending.⁴³ Other budget crosscuts, such as the CALFED Bay-Delta report included in the President’s Budget request, provide additional examples on how to clearly identify federal agency spending and programs in this broad federal-state (California) initiative, as would be necessary for a wildfire crosscut.⁴⁴

Meaningful disclosure and transparency of wildfire spending allowing for an assessment of priorities and efficacy needs to show where taxpayer dollars are going geographically, for which programs, and over what timeframes. Local, state, and national stakeholders inside and outside government have a vested interest in improving the return on investment of wildfire spending and can add value in this process, but only with a better understanding of where tax dollars are going.

Taxpayer Tool: Recalibrate Mitigation vs. Suppression Funding

As USFS has previously noted, increasing budgets dedicated to fire suppression and

its WFM account has decreased the agency’s ability to sustain vital non-fire program areas that could prevent or lessen the impact of future fires, including forest restoration, recreation, research, watershed protection, land conservation, and other activities.⁴⁵ The influx of funding from the IJJA and IRA provided significant resources for non-suppression wildfire programs and may help boost previously underfunded projects, the effect of which still needs to be closely examined. However, year to year appropriations need to continue the emphasis on vital non-fire programs. The FY24 budget request appears to continue the trend of allocating the bulk of wildfire discretionary spending to suppression.

Sustaining funding levels for vital non-fire program areas will be important in the near term to mitigate fire risks and reduce longer term suppression liability. Throughout the past century and various iterations of strategic reviews, fuels reduction and mitigation have repeatedly been recognized as an important tool for federal agencies to reduce the risk and costs of wildfires. Yet, except for the appropriations from the IJJA and IRA, albeit for several fiscal years, annual appropriations for wildfire management has hued to the same formula that disproportionately values suppression at the expense of mitigation. Policymakers know there are limited resources available and that suppressing wildfires will continue to be a significant expense. But unless this recognized need for more balanced spending between suppression and prevention is reflected in annual appropriations, the underlying dynamic will not change.

Taxpayer Tool: Fix the Fix

The problem of fire borrowing was addressed by the creation of the Reserve Fund. The Reserve Fund can only be accessed when wildfire suppression operations under the WFM account is funded in the underlying appropriations at the base level, which is defined as and frozen at the average cost over 10 years for wildfire suppression operations requested in the President’s FY15

Budget. Congress should update the wildfire suppression operations base level to the rolling 10-year average.

The wildfire funding fix was introduced in part to bypass procedural and budgetary controls on discretionary spending under the BCA. Now that the BCA has expired, it is appropriate to reevaluate the budgetary structure of the Reserve Fund.

Transparency and accountability of the Reserve Fund also needs to be addressed. Division O of the Consolidated Appropriations Act of 2018 (P.L. 115-141), which created the Reserve Fund, requires the Secretaries of Agriculture and Interior to submit a report to Congress on any funds used in a given fiscal year. Yet DOI has only published two of these reports – for FY20 and FY21 – which are accessible on the Office of Wildland Fire website. The FY21 report was not added until earlier this year – far later than the 90-day period required by law.⁴⁶ We were

unable to find any reports from USFS.

Requiring online reporting of the Reserve Fund on a regular basis (e.g., semi-annually) would be beneficial for the public and policymakers. Now, halfway through its enactment, the funding fix must be evaluated for whether it is having a positive impact on wildfire spending trends overall, or if it has simply removed any barriers to the continued growth of suppression spending.

Taxpayer Tool: Evaluate and Reform the USFS Trust Funds

The USFS operates multiple trust funds that are funded by timber sales receipts or tariffs on imported wood products. This effectively puts them outside of congressional oversight and control and creates a potential incentive to expand logging operations to generate more revenue. While the goals of the trust funds have merit, they should be subject to greater



oversight and control to ensure they are being operated cost-effectively and responsibly. (For more information about the USFS trust funds, check out our IJA chart and Forest Service Fact Sheet.)

Taxpayer Tool: Early Fire Detection

Detecting a wildfire early allows firefighters and forest managers to respond quickly and more effectively, regardless of whether the fire needs to be monitored, actively managed, or immediately suppressed. Similar technology can also be used to track the progress of the fire and ensure communities have adequate warning time to evacuate if necessary, saving lives in the process. The federal government has begun investing in early detection programs⁴⁷ and has seen positive results so far.⁴⁸ Though, nothing is a substitute for robust pre-fire mitigation, as this is the most effective way to save lives and property from wildfires.

Taxpayer Tool: Fire on the Landscape Can Help

Federal agencies must establish the reasonable expectation that not all fires can be controlled or suppressed and recognize fire as an essential ecosystem process. The well-documented fire deficit during the 20th century⁴⁹—the reduced burned acreage due to fire suppression practices combined with the increased probability of fire caused by climate change—has led to increases in catastrophic wildfires, especially in the West. Prescribed burns, if used effectively, can dramatically reduce wildfire risk by clearing dried brush and reducing hazardous fuels that increase the intensity and severity of a wildfire. Wildland fire use—allowing natural wildfires to burn in remote, forested areas under close monitoring—can also be cost-effective while also providing ecological benefits. The federal government should not try to extinguish every fire at any cost. Rather, the federal government should minimize the amount of suppression activities necessary to protect lives and property.

Taxpayer Tool: Ensuring Mitigation with Insurance

The availability and affordability of homeowners insurance is a powerful motivator for communities and individuals to mitigate wildfire risk. Recent wildfire events have led insurers to refuse to renew policies or dramatically increase policy rates unless blocked by policymakers. This has pushed more policyholders into state Fair Access to Insurance Requirements (FAIR) plans,⁵⁰ which are typically an insurer of last resort, offering lower cost, less comprehensive coverage. States should work with insurers to strengthen incentives⁵¹ to mitigate fire risk at the individual, subdivision, and community level with premium discounts and premium assistance as well as mitigation aid to low-income homeowners. The California “Safer from Wildfires” program is one such initiative. In addition, the factors increasing a property’s risk should be clearly documented, as well as ways to mitigate that risk.

Taxpayer Tool: Risk Mitigation and Smart Redevelopment in the WUI

As the WUI has expanded over the last few decades, high-risk communities in the WUI should invest in fire-proofing their houses, building with fire-proof materials, and creating defensible zones around properties. Local planning and zoning rules need to disincentivize risky developments in the WUI. Any federal post-fire assistance should be conditioned on commitments to adopt appropriate and adequate zoning, building codes, and landscape management explicitly designed to reduce and pre-empt future fire risks. A good example of this emphasis can be seen in the low interest disaster loans provided by the Small Business Administration, which can be increased by up to 20 percent beyond damage costs to help mitigate future property damage.⁵²

Conversely, programs like the National Flood Insurance Program (NFIP) and federally subsidized crop insurance are examples of programs that do not provide adequate incentives to mitigate risk. NFIP has inherent

cross-subsidies in the program, and after a disaster, a property owner can rebuild as before if the repairs are less than 50 percent of the property's (pre-disaster) market value. Even if damages exceed 50 percent, the structure can be rebuilt on that same vulnerable site just elevated above Base Flood Elevation, which is the relatively low 100-year event level. Crop insurance is also heavily subsidized by the federal government and has few strings to adjust behavior to mitigate risk post-disaster. Poorly designed post-disaster federal assistance like the NFIP and crop insurance can incentivize risky behavior, which will only add to the ever-growing future disaster assistance needs and liabilities.

Taxpayer Tool: Set Productive Metrics for Success

Currently, there are no clearly established metrics or criteria for IIJA and IRA funding outcomes, particularly for evaluating risk reduction and ecosystem restoration success. We need better and more productive metrics, like the number of high-risk communities protected, to accurately gauge progress and direct future funding decisions.

The USFS is still using the number of acres treated as a Key Performance Indicator for its hazardous fuel reduction program. A recent investigation by NBC News found USFS counted many of the same acres of land toward its risk reduction goals from two to six times, and even up to dozens of times in a few cases. The USFS has reported it reduced "hazardous fuel" on 40 million acres of land over the past 15 years, but this number may be overstated by as much as 21% nationwide, according to the NBC estimate using USFS records.⁵³ USFS may have been double- or triple-counting acres treated using different methods, like mechanical thinning, pruning, pile burning, etc., as this work is often done in the same area. This inflation of the risk reduction progress may misdirect congressional funding decisions.



Taxpayer Tool: Evaluate What Works in Post Fire Response and Restoration

Post-fire recovery is impacted by a variety of factors, including climate change⁵⁴, human development, and historic forest management practices. These factors, and others unique to a given area,⁵⁵ should be taken into consideration when implementing post-fire management. Long-term monitoring and tracking of replanting and reforestation efforts after wildfire also an important step in determining best practices and where future resources should be allocated.⁵⁶ Post-fire restoration efforts should focus on balancing biodiversity, overall forest health and resilience, and future fire risk mitigation instead of focusing solely on the number of acres treated or numbers of trees replanted.

Taxpayer Tool: Better Federal, State, Local, NGO Collaboration and Engagement

Wildfires span federal, state, and private lands and so must wildfire response, if it is going to be effective. Intergovernmental and interagency coordination and collaboration is needed to maximize effort and efficiency. Communities on the ground have a lens on wildfire and its impacts and should be consulted for ideas and provided accessible information on how to access federal resources and funding.

AGENCY COORDINATION

On January 6, 2023, the U.S. Environmental Protection Agency (EPA) proposed amendments to national ambient air quality standard for fine particle pollution, sometimes called soot, that would lower acceptable levels from 12 micrograms per cubic meter to between 9 and 10 micrograms per cubic meter. As noted in comments submitted to the agency, the lower standard may make it more difficult for USFS or DOI to expand the use of beneficial fire or prescribed burns which would reduce the chance of larger wildfires and its impact on ambient air quality. Both the Wildfire Crisis Strategy developed by USFS and the mandate of the Wildland Fire Mitigation and Management Commission emphasize fuels reduction strategies, including expanded applications of beneficial fire. It would appear this new rule is at cross purposes with other policies being considered by the Administration, as well as new spending allocated for fuels reduction in both the IIJA and IRA.

And while the EPA's Exception Events Rule theoretically allows for beneficial fires, in practice, local implementation of the existing standard already limits the use of prescribed burns. As commenters to the EPA proposed amendment point out, local air regulators prefer to avoid the lengthy paperwork required to receive a waiver under the exemptions rule and instead issue burn bans or deny smoke management permit requests. Interagency wildfire strategies should focus equal attention to the local implementation of federal policy as to the obvious need for communication and coordination across the federal government.

Taxpayer Tool: Timber Subsidies May Lead to Perverse Incentives

Good Neighbor Authority, stewardship contracts, and other subsidies to address the lack of commercial viability of forest and wood products intended to reduce “hazardous fuel” might create perverse incentives that undercut forest health objectives and can increase the risk of fire. Where timber and other forest products harvest can take place is often determined by road access, commercial viability, and other local conditions that may misalign with wildfire spatial patterns or even undermine overall forest health.

A Way Forward

The federal government has a vested interest in wildfire adaptation, prevention, and improved response, and on-the-ground activists in affected communities should not only learn how to connect to federal resources; they should inform and help shape policy reforms. To do this, there needs to be a better understanding of how federal resources connect to agency actions. Many federal programs and policies are broken or insufficient to address the current wildfire crisis. For thoughtful reform or future policy course correction to occur, there must be a clear accounting of where the money is going and the results of that spending. Without increased transparency, understanding, and oversight of the federal government, we will miss this important opportunity to protect communities and create a more durable, resilient landscape.

GOOD NEIGHBOR AUTHORITY

The Good Neighbor Authority (GNA) program was first created in 2001 and has been expanded several times, most recently in 2018. The program enables the Forest Service and the Bureau of Land Management to enter into agreements with states, counties, and tribes to allow these entities to conduct authorized restoration activities including hazardous fuel reduction, habitat improvement or restoration, treatment of diseased or insect infested trees, and National Forest System Road improvement to conduct reforestation. The program is a recognition that forest and forest restoration efforts cross jurisdictional boundaries and to be effective need to pursue a holistic approach.

The 2018 amendments added counties and tribes to the program and also allowed states (not counties or tribes) to retain revenue from timber sales under the GNA. It is not surprising then that a CRS analysis of USFS data found that timber sales doubled from roughly 90 million board feet (MMBF) in fiscal years 2017 and 2018 to more than 182 MMBF in FY2019, which has steadily increased to more than 270 MMBF in FY21. Revenue from these sales must be used on other GNA projects.

However, the full retention of timber sale revenues can be problematic. Federal timber sale funds are used for other resource management activities, and these dollars are being diverted. Furthermore, expanding the revenue retention to counties would create a reliance on an unsteady revenue stream, which has caused long-term funding challenges as we saw in the past with county payments system tied to timber sales.

The next opportunity to amend the GNA will be in the reauthorization of the 2018 Farm Bill which expires on September 30, 2023.

VIII. Spending Across the Federal Government

Federal Agencies Receiving Wildfire Spending

Federal wildfire spending comes in many forms and is spread throughout numerous different federal agencies and departments. The U.S. government is directly responsible for wildfire response and management across roughly 650 million acres of federal lands in the U.S., most of which is overseen by USFS and DOI. Over the past five years (2018-2022), 24 million acres of federal land were burned by wildfires, compared to 14.3 million acres of nonfederal land.⁵⁷ In addition to fighting active wildfires, the federal government implements wildfire preventative measures and post-disaster recovery efforts on federal lands.

The federal government also supports wildfire-related activities on nonfederal lands through wildfire prevention and disaster recovery programs administered by the USDA, FEMA, DOE, and DOD, among other departments and agencies. The National Interagency Fire Center

(NFIC) is responsible for developing national wildland fire policy and oversees interagency activities. And other federal departments and agencies, like NOAA, fund or directly conduct research on wildfire mitigation and prevention.

Forest Service: The majority of federal wildfire funding is allocated to USFS within USDA. Much of this spending is directed toward the USFS's WFM account, which funds the personnel, equipment, and immediate post-fire risk mitigation activities necessary for wildfire suppression on federal lands. As of May 2021, the Forest Service Wildland Fire Management program supported 10,000 firefighters, 900 fire engines, 18 airtankers, and 108 helicopters.⁵⁸ The USFS WFM account and Reserve Fund received \$4.7 billion in discretionary appropriations in FY23, 47% of the Forest Service's total budget.

The USFS has other programs related to wildfire mitigation within the Forest and Rangeland Research, State and Private Forestry, and National Forest System funding accounts. Some of these programs were once included under the overarching Wildland Fire Management



account but have since moved. For example, the Hazardous Fuels program, which is aimed at reducing flammable vegetation in high priority and high-risk areas, was funded under the WFM until FY18, when it was moved under the National Forest System. USFS programs like this cover a wide range wildfire-related expenditures, including competitive grants to nonfederal land managers and federally funded wildfire research.

Department of Interior: Congress appropriates wildfire funding to DOI through its department-wide WFM account. Similar to USFS's WFM account, the DOI account funds personnel, equipment, and immediate post-fire risk mitigation. The DOI WFM account also includes hazardous fuels management and the Joint Fire Science Program, which competitively funds fire science research projects nationally. The DOI WFM account and Reserve Fund received \$1.8 billion in discretionary appropriations in FY23.

U.S. Department of Agriculture: Outside of the Forest Service, USDA oversees the federal crop insurance program and various disaster programs (the latter of which are either ad hoc or permanently authorized through the five-year farm bill). These programs provide taxpayer-subsidized payments to agricultural producers for wildfire-related livestock, crop, and other losses, in addition to losses caused by other natural disasters such as drought and floods.

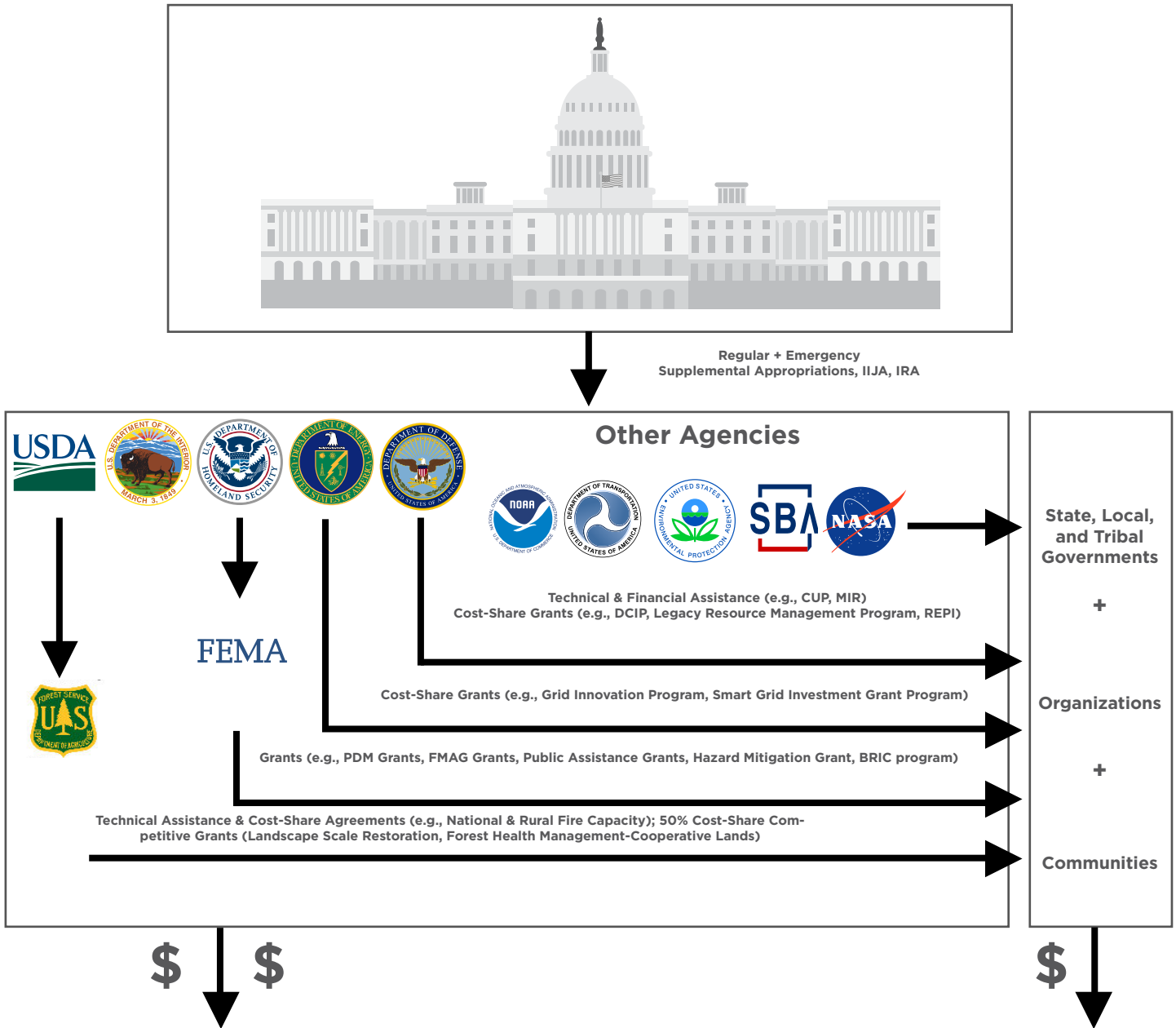
Federal Emergency Management Agency: FEMA provides federal assistance to states and local communities before and after natural disasters. The Disaster Relief Fund provides funds for the management and control of wildfires and other natural disasters on public and private land. Building Resilient Infrastructure and Communities (BRIC) uses a small percentage (up to six percent) of post-disaster emergency spending approved by Congress to fund mitigation projects. Additional programs are pre-disaster mitigation (PDM) and the Hazard Mitigation Grants Program (HMGP) that provides assistance pre- and post-fire.

Department of Energy: DOE provides grants and trainings to communities and industry to address threats to the U.S. energy sector, including the threats of wildfires and other natural disasters. This funding allows communities to upgrade nearby transmission lines and develop technologies to mitigate wildfire and the risk of other disasters, among other activities.

Department of Defense: DOD assists state and local governments in preventing and responding to threats, including wildfires and other natural disasters, that are likely to impair military installations and readiness. DOD also trains members of the armed services to fight wildfires and assists in wildfire suppression operations on both federal and nonfederal land when necessary.

Below is a flow chart illustrating federal wildfire spending distribution, followed by fact sheets on agencies receiving federal wildfire resources.

Figure 9: Federal Agency Wildfire Spending



Wildfire-Related Activities
Prevention, Mitigation, Early Detection, Suppression, Recovery

U.S. Forest Service

Forest Service

Congress appropriates wildfire funding to the USFS department wide WFM account, as well as other USFS programs within USDA that contribute to wildfire management.

The USFS WFM program’s stated purpose is “to protect life, property, and natural resources on the National Forest System” and the 20 million acres of adjacent State and private lands. The program supports approximately 10,000 firefighters, 900 fire engines, and an aviation program (up to 18 exclusive use airtankers and up to 108 exclusive use helicopters). Within the program, funding is directed toward firefighters and to support staff training and salaries, tools to suppress wildfires, and immediate post-fire damage control.

Other USFS programs within Forest and Rangeland Research, State and Private Forestry, and National Forest System also contribute to wildfire management.

- **Forest and Rangeland Research** contains research programs within USFS. This spending line item contains programs that include direct wildfire spending, such as the Joint Fire Science Program, in addition to others that include wildfire-related spending contributing to our nation’s scientific understanding of forest health and management.
- **State and Private Forestry** funds USDA’s national and rural fire capacity programs, which address state and local communities’ ability to address wildfires, in addition to other wildfire-related spending through programs that reside at the intersection between wildfire issues and the management of non-federal forests.
- **The National Forest System** includes programs involving management of National Forest land, including those that impact wildfires such as Hazardous Fuels, Grazing Management, and Forest Products.

Forest Service Programs			
Program	Description	Authorization	Spending
Wildland Fire Management			Total FY23 Enacted: \$2.49 billion
Salaries & Expenses	This line item covers all salaries and expenses for the WFM program, including federal and state firefighters; employee and personnel costs for the first 8 hours incurred when responding to emergencies declared by FEMA; travel and training; and all other firefighter and support staff (e.g. communications staff, WFM leadership) salary and personnel costs.		FY23 Enacted: \$914 million

Preparedness	The Preparedness program covers fixed costs for fire management assets in preparation for wildfire events. This includes training and education, firefighting equipment, and aviation costs.		FY23 Enacted: \$32 million
Suppression	The Suppression program is the primary funding source for wildfire suppression operations and immediate post-fire damage control, including burned area rehabilitation.		FY23 Enacted: \$1.55 billion*
Forest and Rangeland Research			Total FY23 Enacted: \$309.3 million
Joint Fire Science Program	This program, established in 1998, is an interagency partnership between USFS and DOI that provides funding for basic and applied wildfire science research programs. Examples of projects funded in FY23 include studying fire behavior, prescribed fires, fuel reduction, and post-fire recovery.	Partnership authorized in FY98 appropriations (P.L. 105-83)	FY23 Enacted: \$4.5 million**
New	“Cooperative research to develop new understandings and innovative solutions to address wildfire impacts on forested source water, downstream clean water, and water treatability.”	Line item in FY23 omnibus (P.L. 117-328)	FY23 Enacted: \$4 million
New	“University-led research and partnerships to better understand fires in the wildland-urban interface, improve workforce development for wildfire management professionals, and improve the safety and efficiency of wildland firefighting techniques.”	Line item in FY23 omnibus (P.L. 117-328)	FY23 Enacted: \$3 million
New	“To conduct collaborative research to develop remote sensing capabilities that deploy acoustic technologies for wildfire monitoring.”	Line item in FY23 omnibus (P.L. 117-328)	FY23 Enacted: \$1.5 million
New	Other R&D line items directed towards the commercialization of biomass, cellulose nanomaterials (made from biomass and small-diameter trees), and other forest products. ***	Line items in FY23 omnibus (P.L. 117-328)	FY23 Enacted: \$10.5 million
State and Private Forestry			Total FY23 Enacted: \$485.8 million
State Fire Assistance (National Fire Capacity)	This program provides technical assistance and 50% cost-share grants to states. According to USFS, the program’s mission is to	16 U.S.C. §2106	FY23 Enacted: \$76 million

	support and assist State Foresters and local communities in “building capacity for wildfire prevention, mitigation, control, and suppression on non-Federal lands.” Grants may fund training, equipment, and activities relating to wildfire prevention and suppression.	Authorized in the Cooperative Forestry Assistance Act of 1978 (P.L. 95-313)	
Volunteer Fire Assistance (Rural Fire Capacity)	This program provides technical assistance and cost-share grants of up to 50% to volunteer fire departments that cover communities with populations of 10,000 or fewer people. According to USFS, grants focus on “increasing the capacity of local fire departments to provide initial attacks on wildfires” by providing training and funding to purchase equipment.	16 U.S.C. §2106 Authorized in the Cooperative Forestry Assistance Act of 1978 (P.L. 95-313)	FY23 Enacted: \$21 million
Landscape Scale Restoration	This program was originally established to support cross-boundary regional and national forest restoration projects. In the 2018 Farm Bill, the program was modified to encourage science-based projects that restore priority landscapes or address issues/landscapes identified in State Forest Action Plans. Funding is implemented through 50% cost-share competitive grants awarded through the State for projects on state or private land. By law, projects must include plans “to reduce the risk of uncharacteristic wildfires,” among other objectives.	16 U.S.C. §2109a Authorized by the 2008 Farm Bill (P.L. 110–234), amended in the 2018 Farm Bill (P.L. 115-334).	FY23 enacted: \$17 million
Forest Health Management (FHM) - Federal Lands	This program provides technical assistance to federal lands managers for surveying, monitoring, prevention, and suppression activities to mitigate the threat of pests and disease on federal land. The USFS indicates that some of these activities, such as tree thinning, are related to wildfire risk reduction.	16 U.S.C. §2104 Authorized by the 1990 Farm Bill (P.L. 101-624).	FY23 Enacted: \$17 million
Forest Health Management (FHM) - Cooperative Lands	This program provides technical assistance and 50% cost-share grants to states and territories to conduct surveying, monitoring, prevention, and suppression activities to mitigate the threat of pests and disease on nonfederal land. The USFS indicates that some of these activities, such as tree	16 U.S.C. §2104 Authorized by the 1990 Farm Bill (P.L. 101-624).	FY23 Enacted: \$33 million

	thinning, are related to wildfire risk reduction.		
Working Forest Lands / Forest Stewardship Program	This program provides nonindustrial private forest landowners with financial and technical assistance to increase the economic and natural resource value of the forest, which may include funding for activities related to wildfire risk reduction. Funds are distributed to state forest agencies, who in turn provide assistance to private landowners.	16 U.S.C. §2103a Authorized by the 1990 Farm Bill (P.L. 101-624).	FY23 Enacted: \$12.5 million
Urban and Community Forestry	This program provides technical, financial, and educational assistance to a variety of groups – governmental, nonprofit, individuals, etc. – for projects aimed at conserving, protecting, or enhancing urban forests. Supported activities include wildfire prevention and response, among others. UCF also provides 50% cost-share grants for issues identified by the National Urban and Community Forestry Advisory Council (NUCFAC).	16 U.S.C. §2105 Authorized by the Cooperative Forestry Assistance Act of 1978 (P.L. 95-313).	FY23 Enacted: \$40 million
Forest Resource Information and Analysis	Beginning in FY22, this program provided funding for congressionally directed spending, including funding aimed at wildfire prevention and protection. Examples from FY23 include \$3.75 million to San Diego for firefighting helicopters and \$1.5 million to Alaska for Community Wildfire Protection Plan Implementation.	Congressionally directed spending in FY23 omnibus (P.L. 117-328)	FY23 Enacted: \$30.17 million
International Programs and Trade Compliance / International Forestry	This program provides financial and technical assistance to countries that receive U.S. Agency for International Development (USAID) support for a variety of activities, including disaster assistance and preparedness, international law enforcement, and invasive species prevention.	16 U.S.C. §4501 Authorized by FY91 appropriations (P.L. 101-513)	FY23 Enacted: \$20 million
New	“...for grants to states to support economic recovery activities in communities damaged by wildfire.”	Line item in FY23 omnibus (P.L. 117-328)	FY23 Enacted: \$20 million
National Forest System			Total FY23 Enacted: \$2.184 billion
Hazardous Fuels Management	This program funds hazardous fuels reduction projects on National Forest land, as well as fully and partially funding other USFS grant		FY23 Enacted: \$207 million

	programs. Prior to FY18, the Hazardous Fuels budget line item was included under WFM.		
Hazardous Fuels: Wood Innovations Grants Program	Beginning in 2015, this program provided cost-share grants to projects related to the expansion of wood product and energy markets. Grant recipients in 2022 included a wildfire-related project at a sawmill operation, in addition to a biomass power plant, biochar power facility, and others. Program funding also falls within State and Private Forestry.	7 U.S.C. §7655d Established in the 2018 Farm Bill (P.L. 115-334), with \$100 million allocated through IRA (P.L. 117-169) & \$12 million allocated in the IJA for each year FY22-26, which also includes community wood energy (P.L. 117-58).	FY23 Enacted: \$30 million from Hazardous Fuels Account
Hazardous Fuels: Community Wood Energy Program	This program offers 35% cost share grants for installing a community wood energy system - defined as a thermal energy system that uses woody biomass and services public, private, or nonprofit facilities - or building an innovative wood product facility - defined as a plant that uses innovative technology to produce wood products or utilizes low-quality wood. Schools and hospitals in low-income communities receive up to 50% cost share grants. The program's funding authorization is set to expire in FY23.	7 U.S.C. §8113 Authorized by the 2008 Farm Bill (P.L. 110-234), amended in the 2014 Farm Bill (P.L. 113-79) and 2018 Farm Bill (P.L. 115-334), with funding provided through the IJA (info above).	FY23 Enacted: \$15 million from Hazardous Fuels Account
Hazardous Fuels: Collaborative Forest Restoration Program	This program provides 80% cost-share grants of up to \$360,000 for forest restoration projects that, among other goals, are aimed at reducing the threat of wildfires on public or tribal lands in New Mexico. Taxpayer-funded projects in 2022 include thinning, prescribed burns, and other wildfire treatments, as well as promoting the use of woody biomass and small-diameter trees.	Authorized in the Secure Rural Schools and Community Self-Determination Act of 2000 (P.L. 106-393)	

<p>Collaborative Forest Landscape Restoration Program (CFLRP)</p>	<p>This program, started in 2009, provides 50% cost-share grants to regional USFS offices for the implementation and monitoring of ecological restoration projects on priority forest landscapes. Eligible projects must cover at least 50,000 acres and be composed of primarily National Forest System land. By law, the project must, among other things, include plans to “reduce the risk of uncharacteristic wildfire, including through the use of fire for ecological restoration and maintenance and reestablishing natural fire regimes, where appropriate.”</p> <p>According to USFS, CFLRP projects in FY21 conducted 315,000 acres of hazardous fuels treatments, enhanced 60 miles of stream habitat, sold 200 million board feet of timber volume, and established 9,500 acres of forest vegetation. The program’s funding authorization is set to expire in FY2023.</p>	<p>16 U.S.C. §7303</p> <p>Authorized in the Omnibus Public Land Management Act of 2009 (P.L. 111-11), amended by the 2018 Farm Bill (115-334).</p>	<p>FY23 Enacted: \$32 million</p>
<p>Land Management Planning, Assessment, and Monitoring</p>	<p>This line item, which began in FY17, is a combination of two previous line items: Land Management Planning and Inventory and Monitoring. The program creates and oversees land management plans (LMPs) for the National Forest System, which guide management activities on national forests and grasslands. LMPs may include wildfire prevention, suppression, and recovery activities.</p>		<p>FY23 Enacted: \$17 million</p>
<p>Wildlife and Fisheries Habitat Management</p>	<p>According to USFS, this program’s mission is to manage habitats and maintain “ecological conditions needed to maintain the diversity, viability, and productivity of plant and animal communities; and reforestation and revegetation efforts in support of ecological restoration and post-wildfire recovery.”</p> <p>In FY21, the program placed an emphasis on integrated projects with multiple resource benefits, such as wildfire habitat enhancement alongside commercial timber</p>		<p>FY23 Enacted: \$24 million</p>

	harvests and hazardous fuels reduction activities.		
Grazing Management	The Grazing Management program oversees approximately 94 million acres of National Forest System lands. According to USFS, its mission is to “maintain a sustainable supply of forage for livestock, sustain water resources, and provide suitable wildlife habitat and ecosystem services.” Studies have found that grazing can be a tool for hazardous fuels reduction and wildfire prevention, but heavy grazing during the growing season can also potentially lead to an increase in fire frequency.		FY23 Enacted: \$6.3 million
Forest Products	The USFS describes the goal of this program as ensuring the “productive and sustainable use” of national forest land. Timber sales occur under this program through the GNA.		FY23 Enacted: \$40 million
Vegetation and Watershed Management	This program funds vegetation-related projects on USFS land, including work aimed at invasive species, soil productivity, flooding and erosion risk in areas affected by wildfire, and water quality. This program also funds the Wild Horse and Burro program.		FY23 Enacted: \$32 million

Notes: This chart highlights some of the many wildfire-related programs that exist across USFS and is not intended to be a comprehensive list. Enacted FY23 totals listed below reflect regular appropriations and emergency appropriations provided in P.L. 117-328 and do not include supplemental appropriations from the IJA and IRA. New spending line items included in P.L. 117-328 are identified as “New” programs. More details will be added once agencies implement the programs, and more information is known about which types of projects taxpayer dollars are being spent on.

Limited information is publicly available to understand how appropriations are allocated within Forest and Rangeland Research (FRR). Historically, FRR funding was divided into 7 different strategic program areas (SPAs), one of which was Wildland Fire & Fuels. SPAs were presented as line items within Congressional Budget Justifications. Starting in FY20, FRR began to divide its work into research emphasis areas, which can change from year to year and are not broken into distinct line items. The FY22 and FY23 budget justifications included the following priority research areas: 1) applied science to improve forest and grassland conditions, especially science to inform adaptation to climate change and to enhance greenhouse gas mitigation through forest management; 2) forest inventory and trend analysis; 3) wood product and market innovations; and 4) enhanced prediction, planning, decision support, impact assessment, and recovery guidance for the wildland fire system. We do not know how much spending is directed towards each priority research area.

*\$160 million in Suppression appropriations from Division N of the FY23 omnibus are available for “forest fire presuppression.” This term is not defined.

**Enacted appropriations reflect program funds through USFS. DOI received an additional \$4.5 million for the Joint Fire Science Program, bringing total program funding to \$9 million.

***Includes \$5,000,000 to support the Northeastern States Research Cooperative, a collaboration among universities in Maine, New Hampshire, New York, and Vermont, sponsoring research to sustain the health of northern forest ecosystems and communities, develop new forest products and improve forest biodiversity management; \$2,000,000 for research on forest-based cellulose nanomaterials, including material forms, manufacturing processes, and technology transfer; \$2,000,000 to support new and existing academic partnerships to further explore the use of available technologies like remote sensing and methodologies such as small area estimation to further refine county and State biomass estimates as outlined in Sec. 8632 of the Agriculture Improvement Act of 2018 (Public Law 115–334); \$1,500,000 to continue Forest Products Laboratory university partnerships to optimize biomass commercialization, including lumber standards, mass timber construction, and durability.

Other than the discretionary spending programs listed in the above chart, USFS also manages a few trust funds that are mandatory appropriations.

The Brush Disposal (BD) and Knutson-Vandenberg (K-V) trust funds collect timber sale deposits and use the funds to mitigate post timber sale impacts that wouldn't have occurred absent the sale that generated revenue for the trust fund. The Salvage Sale Fund revenues are also generated by sales. The Reforestation Trust Fund revenue is from tariffs on imported timber and wood products and was subject to a \$30 million cap until the IJA removed the cap which has resulted in hundreds of millions of dollars to be diverted from the general treasury into the trust fund. While the goals of the trust funds have merit, they should be subject to greater oversight and control to ensure they are being operated cost-effectively and responsibly.

Department of the Interior

DOI

DOI, along with USDA, oversees wildfire management in the United States. The DOI then delegates that authority through five agencies: The Office of Wildland Fire (OWF), the Bureau of Indian Affairs (BIA), BLM, NPS, and FWS. In conjunction with USFS, these agencies make up the federal wildland fire management community. These agencies also work in conjunction with tribal, state, and local firefighting organizations to make up what is known as the “National Cohesive Wildland Fire Management Strategy”. This Strategy has three national goals including restoring and maintaining landscapes, creating fire adapted communities, and wildfire response.

Congress appropriates wildfire funding to DOI through its department-wide WFM account. Under WFM, DOI’s wildfire funding addresses preparedness, wildfire suppression, and hazardous fuel treatment. Preparedness includes activities such as funding firefighting resources and managing the operations which may be called upon in the event of a wildfire. Preparedness focuses primarily on personnel and equipment, rather than wildfire prevention. Prevention is handled under the fuels management program which includes activities such as managing vegetation, prescribed burns, and hazard reduction to protect communities and infrastructure. Finally, the department also oversees suppression operations which is the direct action of extinguishing and mitigating the effects of ongoing wildfires.

Other WFM programs include Burned Area Rehabilitation (BAR) which carries out post fire landscape improvement and reparation. This includes the repair and restoration of native species, future wildfire mitigation, and other activities. Secondly, DOI oversees facilities construction and maintenance. This pertains to activities such as upkeep of critical infrastructure which is used during a wildfire like fire towers, fire stations, and other critical infrastructure. Finally, DOI runs the Joint Fire Science Program (JFSP) with USDA. This program offers competitive research grants and seeks to better understand and develop appropriate wildfire management strategies which are applicable to the federal, tribal, state, and local fire management systems.

Additionally, Congress funds the Wildfire Suppression Operations Reserve Fund as an emergency fund that DOI can access in the event of wildfire needs exceeding that which is already funded through WFM. Funding not used within the Reserve Fund in a single year is then automatically transferred into the fund for the following year.

DOI Wildland Fire Management		
Program	Description	FY23 Appropriations
Preparedness	This program provides an integrated and coordinated framework for wildfire response. Preparedness funds the core firefighting resources and manages the capacity of assets and operations to respond to fire activities across the United States. This includes personnel and equipment, such as fire vehicles and aviation.	FY23 Enacted: \$427.1 million
Suppression	This program includes the range of actions taken to directly extinguish and manage wildfires, including those for resource benefits. This includes incident management and support functions; aviation assets and operations; logistical services, supplies, and equipment; temporary emergency firefighters; and personnel costs beyond those that are covered by the Preparedness program. Suppression Operations also provides funding for post-fire emergency stabilization, which aims to prevent erosion, flooding, and mudslides.	FY23 Enacted: \$458.7 million
Fuels Management	This program oversees the management of burnable vegetation with the goal of reducing the intensity, severity, or negative effects of wildfire. The program uses a variety of management practices, including prescribed fire, mechanical thinning, and other methods (e.g., chemical, biological, grazing). In FY21, DOI spent \$220 million to treat 1.9 million acres of federal land.	FY23 Enacted: \$247 million
Burned Area Rehabilitation	This program supports efforts to repair or improve burned landscapes that are unlikely to recover without human assistance. BAR picks up where emergency stabilization from Suppression Operations leaves off. Activities include re-seeding or planting trees and other vegetation aimed at mitigating the risk of landslides, preventing the establishment of invasive species, maintaining soil productivity, and initiating the recovery of wildlife habitat.	FY23 Enacted: \$20.47 million
Facilities Construction and Maintenance	This program oversees wildfire facilities.	FY23 Enacted: \$10 million
Joint Fire Science Program	This program, established in 1998, is an interagency partnership between USFS and DOI that provides funding for basic and applied wildfire science research programs. Examples of projects funded in FY23 include studying fire	FY23 Enacted: \$4.5 million*

	behavior, prescribed fires, fuel reduction, and post-fire recovery.	
TOTAL		FY23 Enacted: \$1.17 billion

Notes: This chart highlights DOI WFM programs and is not intended to be a comprehensive list of all wildfire-related programs across DOI. Enacted FY23 totals listed below reflect regular appropriations and emergency appropriations provided in P.L. 117-328 and do not include supplemental appropriations from the IJJA and IRA.

*Enacted appropriations reflect program funds through DOI. USFS received an additional \$4.5 million for the Joint Fire Science Program, bringing total program funding to \$9 million.

U.S. Department of Agriculture

USDA

While most wildfire-related spending at USDA flows through USFS programs, crop and livestock losses due to wildfires are subsidized through other USDA programs. Some of these programs are authorized in the Commodity Title of the farm bill, which is reauthorized approximately every five years. Just a few of these programs include the Livestock Indemnity Program (LIP), the Livestock Forage Program (LFP), and the Noninsured Crop Disaster Assistance Program (NAP).

The aforementioned programs were created in the 2018 farm bill to cover crop and livestock losses that were not eligible for federally subsidized crop insurance. At an average cost of \$8-10 billion per year, the federal crop insurance program has grown in size, scope, and cost since the 1980s. The program now covers approximately 140 different crops throughout the country, for either price dips or yield losses. The latter losses can be due to wildfires, drought, flooding, hurricanes, excessive wind, and several other types of covered losses. On average, taxpayers cover 60 cents of every dollar of federal crop insurance coverage. On the other hand, with programs such as NAP, eligible producers must only pay an administrative fee to receive taxpayer-subsidized disaster payments.

Last, but certainly not least, Congress authorized \$20 billion in unbudgeted, ad hoc disaster aid through appropriations and supplemental spending legislation. Beginning in 2017, certain agricultural producers' losses due to natural disasters such as hurricanes and wildfires were covered by taxpayers. USDA's initial rollout of this federal disaster spending was entitled the Wildfire and Hurricane Indemnity Program (WHIP), then WHIP+, then WHIP+++, and most recently, the Emergency Relief Program (ERP).

In sum, federal taxpayers subsidize wildfire-related losses for agricultural producers through a range of USDA programs to the tune of billions of dollars per year. Particularly in the case of ad hoc disaster aid, measures to improve producers' resilience to future disasters and economic challenges are not built into the program.

Non-Forest Service USDA Programs Covering Wildfire-Related Losses			
Program	Description	Authorization	Funding Status/ Spending Totals
Livestock Indemnity Program (LIP)	This program provides taxpayer-subsidized payments for livestock sold at a reduced price or for livestock deaths caused by wildfire and other disasters, disease, or wildlife attacks.	Permanently authorized by 2014 Farm Bill; reauthorized in 2018 Farm Bill	Such sums as necessary; \$21 million in FY22
Livestock Forage Disaster Program (LFP)	This program provides taxpayer subsidized payments for pasture and grazing losses due to drought in addition to grazed acreage on federal rangeland if a producer is prohibited from grazing due to wildfire. Makes payments on a percentage of feed value.	Permanently authorized by 2014 Farm Bill; reauthorized in 2018 Farm Bill	Such sums as necessary; \$998 million in FY22
Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program (ELAP)	This program payments to producers of livestock, honeybees, and farm-raised fish for losses due to disease, adverse weather events, feed or water shortages, and wildfires. This includes drought or wildfires on private land, the cost of transporting water to livestock, the cost of transporting feed, costs of gathering livestock for treatment of cattle tick fever, honeybee feed, colony and hive loss, and farm-raised fish feed and deaths.	Permanently authorized by 2014 Farm Bill; reauthorized in 2018 Farm Bill	Such sums as necessary; \$208 million in FY22
Tree Assistance Program (TAP)	This program provides taxpayer subsidies to replant or rehabilitate trees, bushes, and vines lost by disasters or disease, including wildfires. Plants must be ornamental, fruit, nut, or Christmas trees produced for commercial sale.	Permanently authorized by 2014 Farm Bill; reauthorized in 2018 Farm Bill	Such sums as necessary; \$9 million in FY22
Noninsured Crop Disaster Assistance Program (NAP)	This program provides taxpayer subsidies to producers growing crops ineligible for the federal crop insurance program when disasters, including wildfires, result in lower yields, crop losses, or prevented plantings. Eligible crops include crops grown for food, for livestock feed, mushrooms and floriculture, honey and maple sap, sea oats and sea grass, sweet sorghum and biomass sorghum, crops grown for the purpose of creating biofuels, ornamental nursery, turf-grass sod, ginseng, crops grown for seed, and others.	Permanently authorized by Federal Crop Insurance Reform and Department of Agriculture Reauthorization Act of 1994	Such sums as necessary; \$170 million in FY21 according to USDA's FY23 budget request

Federal Crop Insurance Program	This program subsidizes insurance for agricultural production, primarily for crops such as corn, soybeans, wheat, and cotton but also fruit, vegetables, seafood, tobacco, pasture, rangeland, and grass seed. Trees can be insured separately from the fruit of trees. In addition to covering yield losses from drought, flooding, and more, the program subsidizes indemnity payments for crop losses due to wildfires.	Permanently authorized by Federal Crop Insurance Act of 1938. Greatly expanded in 1994 and 2000.	Such sums as necessary (on average, CBO projects \$9-10 billion per year over the next decade, but FY23 projected spending is \$15.5 billion)
Emergency Relief Program (ERP) (formerly the Wildfire and Hurricane Indemnity Program (WHIP), and WHIP+ and WHIP++)	WHIP was created by USDA in response to Congress authorizing ad hoc disaster aid for wildfire and hurricane losses experienced in 2017, eventually expanding to cover losses due to floods, excessive heat, and other disasters. The program subsequently subsidized crop and livestock losses caused by natural disasters in 2018, through 2022. In 2022, USDA renamed WHIP as the Emergency Relief Program (ERP).	\$2.36 billion in emergency supplemental tied to Feb. 2018 Bipartisan Budget Act, \$3 billion in FY2019 supplemental, \$10 billion in FY22 continuing resolution & \$3.74 billion in FY23 omnibus (total of \$20B)	\$2 billion spent in 2020, with an additional \$2.93 billion in 2021 & an expected \$7 billion in 2022, according to USDA's Economic Research Service
<p>Notes: This chart highlights some of the many wildfire-related programs that exist across the USDA and is not intended to be a comprehensive list. Please note that due to a lack of transparency, taxpayers do not know exactly how much of each program's spending is directed toward wildfire-related losses, as opposed to those experienced due to drought, flooding, disease, or other disasters. In other words, the table includes total spending levels for each program, not just wildfire-related spending. Spending totals, unless otherwise noted, are compiled from the Congressional Budget Office (CBO).</p>			

Federal Emergency Management Agency

FEMA

FEMA oversees the federal government’s response to natural disasters, including wildfires. Between FY01 and FY20, there were 32 major disaster and 12 emergency declarations related to fire, in addition to 1,032 other wildfire events (FMAG declarations), that were authorized to receive federal aid through FEMA.

Many of the programs run through FEMA are used in preparation for or in response to wildfires. However, since most of these programs are available for all natural disasters, not just wildfires, it is difficult to determine exactly how much of the agency’s funds in a given fiscal year can be directly attributed to wildfire.

Much of the federal assistance FEMA offers to states and local communities after natural disasters, including wildfires, is through the Disaster Relief Fund, which was appropriated \$24.9 billion in FY23, through regular and supplemental appropriations. FEMA also provides grants to organizations that address fire on non-federal land, many of which – particularly in rural communities – are involved in wildfire mitigation and immediate suppression.

Additionally, FEMA oversees the U.S. Fire Administration, which was appropriated \$58.3 million in FY23. Originally established as the National Fire Prevention and Control Administration in 1974, the U.S. Fire Administration collects and distributes national fire data, as well offering educational and training resources. This work also includes wildfire-related research projects and inter-agency coordination for wildfire safety protocols.

The chart below outlines some of the major programs within FEMA that relate to wildfire.

FEMA Wildfire-Related Programs			
Program	Description	Authorization	Spending
Assistance to Firefighter Grants	This program offers up to 85% cost-share grants to nonprofit fire departments, emergency medical service (EMS) organizations not affiliated with a hospital, and State Fire Training Academies (SFTAs) for training, equipment, facilities, vehicles, and emergency responder wellness. Cost-share grant requirements are lessened for entities serving communities with less than 1 million residents.	15 U.S.C. §2229 Authorized by the Federal Fire Prevention and Control Act of 1974 (P.L. 93–498), as amended by P.L. 117–286	FY23 Enacted: \$360 million
Fire Prevention & Safety Grants	This program provides cost-share grants to fire departments and nonprofit organizations for fire	15 U.S.C. §2229	FY22: \$36 million available

	prevention programs and firefighter health and safety research.	Authorized by the Federal Fire Prevention and Control Act of 1974 (P.L. 93-498).	
Staffing for Adequate Fire and Emergency Response (SAFER) Grants	This program offers grants to nonprofit nonfederal fire departments and volunteer firefighter interest organizations to hire or recruit and retain firefighters. The goal of the program is to help communities meet minimum firefighter number standards and attain 24-hour staffing.	15 U.S.C. §2229a Authorized by the Federal Fire Prevention and Control Act of 1974 (P.L. 93-498).	FY23 Enacted: \$360 million
Pre-Disaster Mitigation (PDM) Grants	This program provides 75% cost share grants to state, local, and tribal governments to plan and implement disaster mitigation measures, including against wildfires.	Authorized under the Stafford Act (P.L. 100-707).	FY23 Enacted: \$233 million
Fire Management Assistance Grants (FMAG)	This program offers 75% cost share grants to states, local, and tribal governments for the management and control of fires on public or private land that, by law, are “threatening such destruction as would constitute a major disaster.” Grants can be used for suppression and temporary repairs (30 days of work) to damaged infrastructure but cannot cover prevention or long-term recovery efforts. A fire management assistance declaration covers the current fire and all future declared fires in that calendar year.	Authorized under the Stafford Act (P.L. 100-707).	FY06 to FY15: \$741.8 million obligated
Public Assistance Grants	This program provides grants to state, local, and tribal governments, as well as certain types of private non-profits, to help communities respond to and recover from major disasters or emergencies. Funding is available after a presidential major disaster declaration or emergency declaration. Eligible projects include emergency protective measures, debris removal, and work relating to infrastructure such as roads, bridges, water facilities, and public buildings, among others.	Authorized under the Stafford Act (P.L. 100-707).	FY21: \$565.9 million obligated for fire-related disaster declarations

<p>Hazard Mitigation Grant Program</p>	<p>This program provides grants to state, local, and tribal governments to develop and adopt hazard mitigation plans after a disaster. Funding is available after a presidential major disaster declaration (not emergency declaration). Grants are also available to communities who received a Fire Management Assistance Grant (FMAG) declaration.</p> <p>Eligible projects include planning and enforcement of hazard mitigation plans, flood protection, retrofitting infrastructure to be more resilient, and slope stabilization projects to prevent further losses, among others.</p>	<p>42 U.S.C. §5170c</p> <p>Authorized under the Stafford Act (P.L. 100-707).</p>	<p>FY21: \$11.34 million obligated for fire-related disaster declarations</p>
<p>Building Resilient Infrastructure and Communities (BRIC) Program</p>	<p>This program provides 75% cost share grants and non-financial technical assistance for hazard mitigation and disaster resilience projects, including for wildfire. Examples of activities include hardening structures, hazardous fuels management, and establishing natural fire buffers. Funding for BRIC is provided by an up to 6 percent set-aside of post-disaster FEMA grant funding. In most years it is the most well-funded FEMA program.</p>	<p>42 U.S.C. §5133</p> <p>Authorized under the Disaster Recovery Reform Act of 2018 (P.L. 115-254)</p>	<p>FY22: \$2.3 billion available</p>

Notes: This chart highlights some of the many wildfire-related programs that exist in FEMA and is not intended to be a comprehensive list. Specific appropriations levels are described as “Enacted.” When appropriations information is unavailable, other funding information is used. Two of the FEMA grant programs - Assistance to Firefighter Grants and Staffing for Adequate Fire and Emergency Response (SAFER) Grants - were appropriated funds in the FY23 omnibus text. Funding available for Pre-Disaster Mitigation (PDM) Grants was also directly in the text.

Funding levels for Public Assistance Grants and the Hazard Mitigation Grant Program, as well as the number of wildfire events eligible for FEMA aid from FY01 and FY20, were calculated by TCS using data from OpenFEMA Data Sets, “Disaster Declarations Summaries” and “FEMA Web Disaster Summaries,” both accessed December 7, 2022.

Funding levels for Fire Prevention & Safety Grants, Fire Management Assistance Grants (FMAG), and Building Resilient Infrastructure and (BRIC) Program come from CRS and other government products.

Department of Energy

DOE

DOE spends billions of dollars a year to prepare for and respond to the effects of climate change, including intensifying and more frequent wildfires.

DOE provides grants and trainings to communities and industries to address threats to the U.S. energy sector, including the threats of wildfires and other natural disasters. This funding is directed toward communities to upgrade nearby transmission lines and develop technologies to mitigate wildfire and the risk of other disasters, among other activities.

Many wildfire-related DOE programs fall within the Office of Cybersecurity, Energy Security, and Emergency Response (CESER). According to DOE, CESER “leads the Department’s efforts to secure our Nation’s energy infrastructure against all hazards, to reduce the risks of, and impacts from, cyber events and other disruptive events, and assist with restoration activities.” This department includes programs that prevent and respond to damage caused by manmade and natural disasters, including wildfires. The IIJA also established several grant programs within the Grid Deployment Office.

Since wildfires pose a serious risk to energy infrastructure, increasing resilience to these and other climate-driven events are a part of many other programs involving both federal and non-federal energy resources. DOE also funds research that is directly or indirect related to wildfires through the Office of Science. Additionally, the direct costs of wildfires on DOE-owned resources have also taken a toll on the American taxpayer. For example, two major wildfire events near the Los Alamos National Laboratory - one of seventeen DOE laboratories - in 2000 and 2011 caused a combined \$346.7 million in damages, not including lost productivity.

DOE Wildfire-Related Programs			
Program	Description	Authorization	Spending
EAGLE-I, Situational Awareness & Response Capabilities	A line item within CESER’s Risk Management Tools and Situational Awareness for Non-Cyber Threats and Hazards, EAGLE-I is an interactive geographic information system (GIS) that, according to DOE, provides situational awareness across the energy sector, including “remote sensing and modeling to support energy sector preparedness, response, and recovery effort related to wildfire, flooding, and no-notice incidents (e.g. earthquakes).” The Risk Management Technology and Tools program also develops tools for early detection	CESER has multiple authorities*	Program is within Risk Management Technology and Tools: Advanced Tools to Manage Risks from Natural Hazards & Non-Cyber Threats FY23 Enacted: \$30 million

	and mitigation from the impacts of climate change, including wildfires, and their risks to energy infrastructure.		
All-Hazards Incident Response, Regional Support, and Situational Awareness	A line item within CESER's Infrastructure Security and Energy Restoration, this program trains and coordinates a group of approximately 120 volunteer responders from across DOE to fix damaged energy systems, including damage from wildfires.	CESER has multiple authorities*	FY23 Enacted: \$11 million
Post Disaster Recovery and Resilience	A line item within CESER's Infrastructure Security and Energy Restoration, this program supports energy security risk analysis and resilience planning with state, local, and tribal governments to improve preparedness for all hazards, including wildfires.	CESER has multiple authorities*	Program is within Planning, Preparedness, and Resilience FY23 Enacted: \$17.86 million
State Energy Security Planning Technical Assistance	A line item within CESER's Infrastructure Security and Energy Restoration, this program provides technical assistance to state, local, and tribal governments for risk management against cyber-attacks and the impacts of climate changes, including extreme weather events like wildfires.	CESER has multiple authorities*	Program is within Planning, Preparedness, and Resilience FY23 Enacted: \$17.86 million
Defense Critical Electric Infrastructure (DCEI)	A line item within CESER's Infrastructure Security and Energy Restoration, this program works to strengthen the critical infrastructure systems needed to ensure defense activities can continue in the wake of manmade and natural disasters, including wildfires.	16 U.S.C. §824o-1 Authorized by the Federal Power Act, as amended by Fixing America's Surface Transportation Act (P.L. 114-94)	Program is within Planning, Preparedness, and Resilience FY23 Enacted: \$17.86 million
Non-cyber exercises and training	A line item within CESER's Infrastructure Security and Energy Restoration, this program hosts exercises on the impacts of natural disasters – including wildfire – and other non-cyber physical incidents to energy infrastructure for industry, stakeholders, and state, local, and tribal governments.	CESER has multiple authorities*	Program is within Training and Exercises FY23 Enacted: \$9 million
North American Energy	Funded under the Office of Electricity's Transmission Reliability and Resilience program, NAERM simulates the impacts of natural and		FY23 Enacted: \$30.6 million

Resilience Model (NAERM)	man-made events, including wildfires, to the energy sector.		
Grid Resilience Utility and Industry Grants (Preventing Outages and Enhancing the Resilience of the Electric Grid)	This program, within the Grid Deployment Office, provides 50% cost share grants (with exceptions for small utilities) to industry – including electric grid operators, electric generators, electric storage operators, transmission owners, distribution providers, and fuel suppliers – to mitigate the impacts of weather hazards, including wildfire, to the electric grid. 30% of funding will be set aside for small utilities (no more than 4 million MWh/year). Activities include fire-resistant technologies, fire prevention systems, vegetation and fuel-load management, and the undergrounding of electrical equipment, among others.	Authorized in the IIJA (P.L. 117-58) Section 40101(c).	The IIJA appropriated \$2.5 billion for F2022 – F2026 DOE anticipates making \$918 million available across 10 grantees under a 2023 FOA.
Grid Innovation Program (Upgrading Our Electric Grid and Ensuring Reliability and Resiliency)	This program, within the Grid Deployment Office, provides 50% cost share grants to states, local governments, tribal entities, and public utility commissions to “use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability,” according to DOE. Improving grid resilience includes preventing and recovering from extreme weather and climate change, including wildfires.	Authorized in the IIJA (P.L. 117-58) Section 40103(b).	The IIJA appropriated \$5 billion for FY22 – F2026 DOE anticipates making \$1.82 billion available across 4-40 grantees under a 2023 FOA.
Smart Grid Investment Grant Program (Deployment of Technologies to Enhance Grid Flexibility)	This program, within the Grid Deployment Office, provides 50% cost share grants available to nonprofit, for-profit, and governmental entities for the deployment of advanced grid technologies. According to DOE, the program focuses on “increasing capacity of the transmission system, preventing faults that may lead to wildfires or other system disturbances, integrating renewable energy at the transmission and distribution levels, and facilitating the integration of increasing electrified vehicles, buildings, and other grid-edge devices.” Priority investments are, among others, projects that anticipate and mitigate the impacts of extreme weather or natural disasters on grid resiliency.	42 U.S.C. §17386 Authorized in the Energy Independence and Security Act of 2007 (P.L. 110-140), as amended by the IIJA (P.L. 117-58) Section 40107.	The IIJA appropriated \$3 billion for FY22 – F2026. DOE anticipates making \$1.08 billion available across 25-40 grantees under a 2023 FOA.

Notes: This chart highlights some of the many wildfire-related programs that exist in DOE and is not intended to be a comprehensive list. Some of the DOE wildfire-related programs highlighted in the chart are not direct line items. When direct appropriations amounts are unavailable, program totals are used to provide some funding context. Programs were obtained from Congressional Budget Justifications and programs created/expanded in the IJJA.

*CESER cites the following legislative authorities: the Energy Independence and Security Act of 2007 (P.L. 110-140), Fixing America's Surface Transportation Act (P.L. 114-94), and the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116-92).

Department of Defense

DOD

Wildfires, exacerbated by climate change, are a growing concern for DOD. Wildfires pose risks to critical infrastructure, equipment, and personnel in military installations across the world.

For example, a 2016 wildfire at Vandenberg Air Force Base burned over 10,000 acres, forced a scheduled rocket launch to be delayed, and caused several facilities on the base to operate on generators due to the loss of electrical power lines. Incidents such as this are frequent, especially in the American West. In 2020, the Naval Air Weapons Station (NAWS) in California reported cancelling 11 Department of State tests and several air operation sorties due to wildfires.

A recent analysis of 79 military installations across the country found that roughly one-half are vulnerable to wildfire events. And these risks are only expected to grow. The DOD's 2021 Climate Adaptation Plan stated that the "risk of wildfires is projected to increase on many installations, ranges, and in land proximate to installations including where military and civilian personnel reside." DOD also faces additional challenges, as military testing and training can ignite wildfires.

DOD funds the prevention and suppression of wildfire activities on military and military-adjacent land, as well as recovery efforts after disaster. The DOD oversees 27 million acres of land in the United States and abroad. According to a recent press release, wildland fire management activities are conducted on roughly 1 million acres every year. The department also provides financial and technical assistance to state and local governments to prevent and respond to threats, including wildfires and other natural disasters, that have potential to impair nearby military installations.

Additionally, DOD trains members of the armed services to assist in wildfire suppression operations on both federal and nonfederal land when necessary. Since 1987, DOD has provided aircraft and active-duty military personnel to serve as wildland firefighters on at least 40 separate occasions. The Air Force Wildland Fire Branch (AFWFB) and Army Wildland Fire Management Program assist in wildfire suppression and conduct wildfire prevention activities, such as prescribed burns and brush removal. Between FY20 and FY23, Congress has appropriated more than \$9.2 million to train Air National Guard and Army National Guard personnel to fight wildfires.

DOD also offers technical support to federal and nonfederal firefighters. The FireGuard Program, launched in 2019, uses military-operated satellites and civilian resources to detect and evaluate wildfires. DOD also participated in programs that loan federal property to nonfederal firefighters. Much of the property used in the Federal Excess Personal Property Program and Firefighter Property Program originally belonged to DOD.

The following chart includes some of the major wildfire-related programs within DOD. When available, cost estimates are provided.

DOD Wildfire-Related Programs			
Program	Description	Authorization	Spending
Compatible Use Plan (CUP)	CUP provides technical and financial assistance to state, local, and Tribal governments for studies to identify and mitigate activities that, according to the Congressional Research Service (CRS), “potentially impair the long-term readiness and military value” of military installations. Studies also examine the impact of the military’s presence on the local economy and natural/cultural resources. Past grants have included studies on enhancing infrastructure resilience to extreme weather events, like sea level change.	10 U.S.C. §2391 Established in 1985 as the Joint Land Use Study Program (JLUS)	According to CRS, CUP awarded 25 grants in FY20, totaling \$11.46 million.
Military Installation Resilience (MIR)	MIR provides technical and financial assistance to state, local, and Tribal governments for studies that identify and assess natural and man-made threats, such as wildfire, to infrastructure outside a military installation.	Authorized in FY19 National Defense Authorization Act (P.L. 115–232).	According to CRS, MIR awarded 11 grants in FY20, totaling \$5.74 million.
Defense Community Infrastructure Pilot (DCIP)	DCIP provides 70% cost share grants to state and local governments to “address deficiencies in community infrastructure” that supports military installations, according to DOD. Eligible grantees include transportation, community support facilities (e.g., fire department, school), and utility projects that will enhance military value, installation resilience, or military life. Example projects include \$2.5 million to the state of Hawaii and \$3.5 million to Walton County, Florida for improved wildfire response.	10 U.S.C. §2391 Authorized in FY19 National Defense Authorization Act (P.L. 115–232). Authority will expire in FY29	FY23 Enacted: \$100 million Congress has appropriated \$300 million between FY20 and FY23.
Department of Defense Natural Resources Program	This program oversees the management of natural resources on approximately 27 million acres of land owned or operated by DOD, including the creation and implementation of Integrated Natural Resources Management Plans across 341 military installations. DOD describes the program’s key priorities as “reducing regulatory mission impacts, climate adaptation,		Obtaining appropriated funding for natural resources projects is the responsibility of each military service.

	and aligning NR program activities and investments to support DOD’s mission.”		
Legacy Resource Management Program	This program, founded in 1990, provides competitive grants to projects that protect and enhance natural and cultural resources while maintaining military readiness. Its strategic priorities are wildland fire management, mission readiness, species protection, climate adaptation and resilience, and support for DOD Natural Resources, Cultural Resources, and Native American Affairs programs. In March 2021, one project funded a DOD Wildfire Hazard Assessment, which identified 44 installations with high to moderate wildfire hazard.	Authorized in FY91 National Defense Appropriations Act (P.L. 101-511)	Between 1991 and 2021, DOD has issued more than \$360 million in grants to over 3,100 projects.
Readiness and Environmental Protection Initiative (REPI)	REPI allows DOD to enter cost share agreements (with no minimum cost share requirement) with state governments, local governments, and private conservation organizations to purchase easements or other interests in land surrounding military installations. Projects must limit land use that is incompatible with the mission of the installation, preserve habitat, relieve current or future restrictions on military activities, or enhance installation resilience from extreme weather events. In FY21, REPI awarded \$1.1 million to U.S. Army Garrison, Hawaii for wildfire mitigation, management, and restoration, with an emphasis on firebreak development.	10 U.S.C. §2684a and 10 U.S.C. §2692a Authorized in the FY02 National Defense Authorization Act (P.L. 107-314)	Appropriations may come from a military service’s Operations and Maintenance (O&M) budget or specific Congressional line items. Since the establishment of the program, DOD has issued \$750 million in grants.
Sentinel Landscapes Partnership	This partnership coordinates between DOD, the U.S. Department of Agriculture, and the Department of the Interior to target conservation efforts on sentinel landscapes, defined by the group as “areas in which natural and working lands are well suited to protect defense facilities from land use that is incompatible with the military’s mission.” The partnership accomplishes this by connecting private landowners with federal and state assistance programs, including	10 U.S.C. §2684a Authorized in the FY18 National Defense Authorization Act (P.L. 115-91)	Since its founding, Sentinel Landscapes Partnership has spent \$141 million in DOD funds, \$223 million in USDA funds, and \$41 million in DOI funds.

	those that address wildfire prevention, suppression, and recovery.		
Strategic Environmental Research and Development Program (SERDP)	<p>This program awards research grants to federal and private organizations for research projects that will, according to DOD, “reduce the costs, environmental risks, and time required to resolve environmental problems while, at the same time, enhancing and sustaining military readiness.”</p> <p>DOD works in partnership with the Department of Energy and the Environmental Protection Agency. Previous projects have included wildfire-related research, such as understanding the air quality impacts of prescribed burns and improving wildfire modeling.</p>	<p>10 U.S.C. §2901</p> <p>Authorized in the FY91 National Defense Authorization Act (P.L. 101-510)</p>	<p>Congress has appropriated \$735 million as of FY22.</p>
Environmental Security Technology Certification Program (ESTCP)	<p>This program awards research grants to federal and private organizations for projects to develop and validate technologies that address DOD priority environmental and installation energy requirements. To be eligible, technologies must have completed successful laboratory testing. One of the FY23 topic areas was improved wildland fire management tools for testing and training utilization.</p>	<p>Established in 1995</p>	<p>Congress has appropriated \$715 million as of FY22.</p>
Department of the Army - Integrated Training Area Management (ITAM) Program	<p>ITAM is a part of the Sustainable Range Program (SRP). According to DOD, ITAM’s goal is to provide Army officers with “the capability to manage and maintain training and testing land by integrating mission requirements with environmental requirements and sound land management practices.” ITAM funds work assessing land quality, integrating training and land management requirements, rehabilitating training land, and educating land users.</p>	<p>Sustainable Ranges Initiative established in 2001</p>	

<p>Army Wildland Fire Management Program</p>	<p>This program seeks to lower the risk of wildfire to installations and military land through reducing the potential for an uncontrolled wildfire emergency. 2021 program accomplishments included studying wildfire activity and impact on Army installations, creating wildfire guidance materials, and developing a reporting platform for Army wildland fire activity.</p>		
<p>Air Force Wildland Fire Branch</p>	<p>The Air Force Wildland Fire Branch helps manage increasing wildland fire threats to Air Force missions through the execution of fuel reduction activities and wildfire mitigation.</p>	<p>Established in July 2012 as part of the Air Force Civil Engineer Center Environmental Directorate</p>	

Notes: This chart highlights some of the many wildfire-related programs that exist in DOD and is not intended to be a comprehensive list. Some of the DOD wildfire-related programs highlighted in the chart are not direct line items. The information used to provide context for program spending levels is taken from a variety of sources, including CRS, Congressional Budget Justifications, reports to Congress, and other DOD publications.

There is minimal funding information on the Army Wildland Fire Management Program and Air Force Wildland Fire Branch, although both programs are well documented. In the introductory section to this chart, we use a conservative estimate of at least \$9.2 million to train Air National Guard and Army National Guard personnel to fight wildfires between FY20 and FY23. This number comes from wildfire training line items in the Operations & Maintenance (SAG: 11G and SAG:121) congressional budget justification. It does not include, for example, additional funds allocated through National Guard Personnel Special Training line item that may be used for wildfire training, as was the case in FY23.

Wildfire Spending Across Other Federal Agencies

As climate change affects much of the federal budget, so does wildfire. Wildfires, and other extreme weather events, pose hazards to many aspects of the economy and everyday life. The federal government uses resources across a variety of departments and agencies to mitigate the negative impacts of wildfires. Below are examples of some of the many other federal programs related to wildfires:

- *Department of Transportation*
 - U.S. transportation infrastructure can be negatively impacted by wildfire, as well as post-fire disasters like mudslides and flash floods. The DOT rebuilds infrastructure after wildfire events and funds efforts to make new and existing infrastructure more resilient to wildfires.
- *National Oceanic and Atmospheric Administration*
 - NOAA's mission is to research, predict, and report on changes in climate and weather, including wildfires. For example, NOAA partners with DOI and USDA to rapidly detect and report wildfire starts.
- *National Aeronautics and Space Administration*
 - NASA conducts earth science research that can be used to better understand, predict, and monitor wildfire events and support suppression efforts.
- *National Institute of Standards and Technology*
 - NIST conducts and funds research on the risks wildfires pose to infrastructure, particularly in the wildland-urban interface (WUI).
- *Small Business Association*
 - SBA provides financial support to small businesses, including low interest loans after natural disasters, such as wildfires, occur.
- *Environmental Protection Agency*
 - EPA conducts research and offers grants relating to air quality from wildfire events.

Wildfire Spending Across Other Federal Agencies		
Program	Description	Spending
DOT Wildfire-Related Programs		
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program	Created in the Infrastructure Investment and Jobs Act (IIJA) in 2021, the PROTECT program (23 U.S.C. 176(c)) provides formula funding and 80% cost share grants to State DOTs for improving surface infrastructure resilience. States may use funding for planning, construction, and improvements to existing highway projects, public transportation facilities, port facilities, evacuation routes, and other coastal infrastructure.	FY22 Enacted: \$7.3 billion in formula funding and \$1.4 billion in grants in the IIJA available until FY26.
Emergency Relief	This program provides up to 100% cost share grants for emergency and permanent repairs on federal roads that have been damaged by natural disasters, such as wildfires*, or other external causes.	Permanent authorization of \$100 million per year in contract authority from the Highway Trust Fund. \$803 million in supplemental appropriations in FY23.
NOAA Wildfire-Related Programs		
Observation and Dissemination Infrastructure for Wildfires	This line item funds ground-based observations and dissemination systems to understand atmospheric processes associated with wildfire-atmosphere interactions, including smoke and its impact on solar radiation, and improve NOAA's weather and air quality prediction systems.	FY22 enacted: \$50 million in the IIJA available until FY24
Wildfire Research Operations	The IIJA appropriated an additional \$50 million for "wildfire prediction, detection, observation, modeling, and forecasting, for fiscal year 2022." According to NOAA, this funding will be distributed internally for wildfire research.	FY22 enacted: \$50 million in the IIJA
Research Supercomputing Infrastructure	The IIJA appropriated an additional \$80 million for "weather and climate model development to improve drought, flood, and wildfire prediction, detection, and forecasting."	FY22 enacted: \$80 million in the IIJA

National Weather Service (NWS)	NWS provides weather, water and climate data, forecasts, warnings, and impact-based decision support services, including those for wildfire.	FY23 enacted: \$1.25 billion
National Environmental Satellite, Data, and Information Service (NESDIS)	NESDIS operates and manages the United States environmental satellite programs and manages the data gathered by the National Weather Service and other government agencies and departments, including data on wildfires. The Advancing Fire Weather Priorities line item, within Product Development, Readiness and Application, includes research and development for fire products.	FY23 enacted: \$383.7 million
Oceanic and Atmospheric Research	NOAA's research department works to provide better forecasts and earlier warnings for natural disasters.	FY23 enacted: \$687.8 million
NASA Wildfire-Related Programs		
Space-Based Wildfire Detection Technologies	This FY23 omnibus line item funds concept studies "to develop and demonstrate low-cost and scalable technologies that passively monitor areas of the United States susceptible to wildland fires and provide early warning to first responders."	FY23: \$8 million
Advanced Capabilities for Emergency Response Operations (ACERO)	This new program aims to improve aerial responses to wildfires by coordinating aerial wildfire response efforts. Other activities will include identifying fire ignition sites and improving weather modeling. Similar work was previously completed under the Scalable Traffic Management for Emergency Response Operations (STEReO) project, FY20-22.	FY23 Enacted: \$10 million
NASA Disasters Program	This program, under the Earth Science Applied Sciences Program, uses observations and applied research to better prepare, predict, and respond to natural disasters, including wildfires. Wildfire imagery and data products include identifying active fires, burned regions, high fire-risk conditions (soil moisture), damaged infrastructure, and areas that lost power.	

Fire Information for Resource Management System (FIRMS)	This program distributes near real-time fire data within 3 hours of satellite observations. The program primarily uses data from the NASA Land, Atmosphere Near real-time Capability for EOS system (LANCE), which is part of NASA's Earth Science Data and Information System (ESDIS).	
Wildland FireSense Project	This competitive grant program, under Advanced Information Systems Technology within NASA's Earth Science Division, will fund research projects on observation and information system technologies that "improve prediction and management of wildfires and their impacts," according to the FY23 NASA budget request.	
NIST Wildfire-Related Programs		
Climate and Energy Measurement, Tools, and Testbeds	This FY23 omnibus line item funds NSIT-conducted climate research, including research with the goal of building communities that are more resilient to extreme weather events like wildfires.	FY23 Enacted: \$67.23 million
Disaster Resilience Research Grants (DRRG)	NIST, in partnership with the National Science Foundation, offers grants for research on natural disaster resilience, including research to reduce the risk of fire hazards in wildland-urban interface communities.	May 2022: \$7.6 million in grants
SBA Wildfire-Related Programs		
Disaster Loans Program Account	This program provides low interest loans to businesses and homeowners in declared disaster areas for physical repairs, financial obligations / operating expenses, and to mitigate future disasters.	FY23 Enacted: \$1.04 billion
EPA Wildfire-Related Programs		
AirNow Fire and Smoke Map	This program, in collaboration with the USDA, was created in August 2020 to provide public information on wildfires, including reporting on air quality.	FY23 Enacted: \$3 million, at least**
Wildfire Smoke Preparedness Grants	This program provides 90% cost share grants to states, tribes, educational agencies, and nonprofit organizations to assess, prevent, or	FY23 Enacted: \$7 million

	mitigate wildfire smoke hazards in community buildings	
<p>Notes: This chart highlights some of the many wildfire-related programs that exist across the federal government and is not intended to be a comprehensive list. Some of these programs, including those listed within DOT and NOAA, are newly established in the IJA or specifically directed through line items in the FY23 appropriations bill. Others, like those listed within NIST, SBA, and EPA, are established programs that receive regular funding. The programs also range in their relationship to wildfire policy; for example, while some National Weather Service activities pertain to wildfire, many other activities do not.</p> <p>There are several NASA programs that do not have publicly available appropriation information, including NASA's Disasters Program area within the Earth Science Applied Sciences Program and the Fire Information for Resource Management System (FIRMS), one tool within this program.</p> <p>Information on the Wildland FireSense Project is also limited. The project started in 2023 and was described in the FY23 budget request, although there is already a website and funding announcement. An amendment, issued June 2022, to the NASA Research Announcement "Research Opportunities in Space and Earth Sciences (ROSES) 2022" says that NASA expects the program budget for new awards to be \$3 - \$7.5 million each year.</p> <p>*Wildfires were added as a qualifying natural disaster in the IJA **The FY23 appropriations bill, P.L. 117-328, includes "an increase of \$3,000,000 in accordance with the request for wildfire smoke-related activities" per the Division G explanatory statement.</p>		

IX. Appendix

Methodology

There is no consistent definition of what constitutes federal wildfire spending. There are a vast number of federal programs and appropriations accounts that could be grouped under the general umbrella of wildfire spending. For the sake of this report, TCS uses a broad definition of wildfire-related spending.

Unsurprisingly, the overall sums TCS presents in this report as “wildfire-related” spending – whether for a given fiscal year or appropriations bill (e.g., IIJA, IRA) – may not align with other publications. Even the federal government does not always use a compatible definition of what constitutes wildfire spending. In a press release, DOI stated that the IIJA invested \$5 billion – \$3.5 to USFS and \$1.5 to DOI – in federal wildland fire management efforts. But using Congressional Research Service reports on wildfire appropriations in FY22 and FY23, TCS calculates that the CRS topline for wildfire appropriations in the IIJA is \$4 billion – \$2.5 to USDA and \$1.5 to DOI.

The goal of this report is not to calculate a complete number for historic federal spending on wildfire, but instead is to begin an investigation into the many federal programs and appropriations accounts that contribute to wildfire policy. To best accomplish this goal, TCS included any program we believed has a reasonable impact on wildfire behavior or is frequently raised during conversations surrounding federal wildfire policy. For example, as forest health and general forest management are inherently related to wildfire, we have opted to include most programs and appropriations accounts at the U.S. Forest Service.

Additionally, we included a number of programs and appropriations accounts that address wildfires as part of a broader mandate. This is particularly notable in programs that address natural disasters (e.g., BRIC, ERP) or other physical threats to communities and infrastructure (e.g., NAERM), but also applies more generally to programs with goals that may not prioritize wildfire, but can be used to fund wildfire-related activities (e.g., DCIP). When possible, we have included cost estimates specific to wildfire. However, detailed cost breakdowns for many of these programs are not publicly available or, at the least, are not easily accessible. When more detailed information is not available, we provide cost estimates for the entire program or the most specific subprogram possible.

Acronyms

ACERO - Advanced Capabilities for Emergency Response Operations

AFWFB - Air Force Wildland Fire Branch

BAR - Burned Area Rehabilitation

BCA - Budget Control Act of 2011 (P.L. 112-25)

BD - Brush Disposal

BIA - Bureau of Indian Affairs

BLM - Bureau of Land Management

BRIC - Building Resilient Infrastructure and Communities Program

CBO - Congressional Budget Office

CE - Categorical Exclusion

CESER - Office of Cybersecurity, Energy Security, and Emergency Response

CFLRP - Collaborative Forest Landscape Restoration

CRS - Congressional Research Service

CUP - Compatible Use Plan

DCIP - Defense Community Infrastructure Pilot

DOD - United States Department of Defense

DOE - United States Department of Energy

DOI - United States Department of the Interior

DOT - United States Department of Transportation

DRF - Disaster Relief Fund

DRRG - Disaster Resilience Research Grants

ELAP - Emergency Assistance for Livestock, Honeybees and Farm Raised Fish Program

EMS - Emergency Medical Service

EPA - Environmental Protection Agency

ERP - Emergency Relief Program

ESA - Endangered Species Act

ESTCP - Environmental Security Technology Certification Program

FAIR - Fair Access to Insurance Requirements

FEMA - Federal Emergency Management Agency

FHM - Forest Health Management

FIRMS - Fire Information for Resource Management System

FLAME - Federal Land Assistance Management, and Enhancement Act

FMAG - Fire Management Assistance Grants

FWS - Fish and Wildlife Service

FY - Fiscal Year

GIS - Geographic Information System

GNA - Good Neighbor Authority

HMGP - Hazard Mitigation Grants Program

IIJA - Infrastructure Investment and Jobs Act (P.L. 117-58)

IRA - Inflation Reduction Act (P.L. 117-169)

ITAM - Department of the Army - Integrated Training Area Management Program

JFSP - Joint Fire Science Program

K-V - Knutson-Vandenberg

LFP - Livestock Forage Program

LIP - Livestock Indemnity Program

LMP - Land Management Plan

MIR - Military Installation Resilience

MMBF - Million Board Feet

NAERM - North American Energy Resilience

NAP - Noninsured Crop Disaster Assistance Program

NASA - National Aeronautics and Space Administration

NAWS - Naval Air Weapons Station

NESDIS - National Environmental Satellite, Data, and Information Service

NEPA - National Environmental Policy Act

NIBS - National Institute of Building Sciences

NIFC - National Interagency Fire Center

NISC - National Invasive Species Council

NFIP - National Flood Insurance Program

NIST - Institute of Standards and Technology

NFS - National Forest Service

NPS - National Parks Service

NRCS - Natural Resources Conservation Service

NFP - National Fire Plan

NOAA - National Oceanic and Atmospheric Administration

NUCFAC - National Urban and Community Forestry Advisory Council

NWS - National Weather Service

OMB - Office of Management and Budget

OWF - Office of Wildland Fire

PG&E - Pacific Gas and Electric Company

PDM - Pre-Disaster Mitigation grants

PROTECT - Promoting Resilient Operations for Transformative, Efficient, and Cost Saving Transportation formula program

R&D - Research and Development

REPI - Readiness and Environmental Protection Initiative

SAFER - Staffing for Adequate Fire and Emergency Response grants

SBA - Small Business Administration

SERDP - Strategic Environmental Research and Development Program

SFTA - State Fire Training Academies

SRP - Sustainable Range Program

TAP - Tree Assistance Program

TCS - Taxpayers for Common Sense

UCF - Urban and Community Forestry

USAID - United States Agency for International Development

USDA - United States Department of Agriculture

USFS - United States Forest Service

WFM - Wildland Fire Management

WHIP - Wildfire and Hurricane Indemnity Program

WUI - Wildland Urban Interface

Priority Landscapes

The Initial Landscape Investments are part of the US Forest Service's 10-year Wildfire Strategy. The US Department of Agriculture has invested \$131 million to treat forests at risk for wildfire.

- **Four Forest Restoration Initiative** (FY22-24: **\$160 million**)
 - FFRI is a 2.4-million-acre pine forest in northern Arizona. Within the plan are 6 out of the 10 highest priority fire sheds in the southwest. The project will attempt to attract the timber industry to provide ecologically sound development and prevent over-growth.
- **Greater Prescott Area** (FY22-24: **\$28.7 million**)
 - GPA is a 401,000-acre area in Arizona. The project aims to restore fire adapted ecosystems to up to 40% of the total landscape.
- **North Yuba Landscape** (FY22-24: **\$25.5 million**)
 - The NYL is a 313,000-acre watershed which is one of the largest "unburned" landscapes in the Sierra Nevada. It is located within Tahoe National Forest in California. The project seeks to improve watershed resilience by protecting 260,000 acres of water supply.
- **Stanislaus** (FY22-24: **\$55.2 million**)
 - Stanislaus is an area of 245,000 acres in California. This landscape will be treated by removing biomass, machine and hand piling for burning, prescribed burns, and hazard tree removal. This project seeks to protect communities and infrastructure in several adjacent areas.
- **Colorado Front Range** (FY22-24: **\$170.4 million**)
 - This is a 3.5-million-acre range in Colorado. This area is particularly susceptible to intense fires due to years of fire suppression and buildup of fuel and biomass. The project will attempt to both mechanically thin the range and have prescribed burns to resolve the issue.
- **Southwest Idaho** (FY22-24: **\$59.5 million**)
 - This is a 1.72-million-acre area in Idaho. This project, under the Good Neighbor Authority, seeks to work collaboratively with native American tribes to promote forest health and resilience as well as restoration of the forest from industry overuse.
- **Kootenai Complex** (FY22-24: **\$19.3 million**)
 - This is an 800,000-acre area in both Montana and Idaho. This project will be treating hazardous fuels within high-risk fire sheds which pose a risk to several communities. Data suggests that these communities are at high risk for potential severe wildfire events and are therefore being targeted to prevent such events from occurring.
- **Enchanted Circle** (FY22-24: **\$11.3 million**)
 - Enchanted Circle is a 1.5-million-acre plot within New Mexico. Using prescribed fire and mechanical fuel treatment as well as timber sales and wetland restoration, this project will treat both public and private land. This project is hoped to both create timber sales and create a fire resilient landscape.
- **Central Oregon** (FY22-24: **\$41.3 million**)
 - This area is a 2.6-million-acre swath of land in Oregon on state, federal, and private land on the east side of the cascade mountains. The project will focus on collaboration with local tribes to create sustainable forests and development to complement the region's tourism industry.
- **Central Washington Initiative** (FY22-24: **\$102.6 million**)
 - This is a 2.45-million-acre region in Washington state. This project aims to restore regional flora and reinvigorate the natural habitats in order to create more resilient landscapes.
- **San Carlos Apache Tribal Forest Protection** (FY23: **\$32 million**)
 - This a 3 million acre protected area in the state of Arizona. This is an Apache tribe focused project which seeks to protect drinking water systems and residential areas. It will primarily use fuel reduction processes to prevent wildfire near populated areas.

- **Plumas Community Protection** (FY23: **\$274 million**)
 - This is a 285,000 acre area in California focused on protecting communities in and around Plumas National Forest with wildfire hazard potential and critical infrastructure in the same area. This project will improve infrastructure for community egress, reduce the potential for extreme fire behavior near communities, and create a resilient forest structure.
- **Southern California Fire shed Risk Reduction Strategy** (FY23: **\$10 million**)
 - This is a 4-million-acre area in California. This project is focused on vegetation management and is one of the only protected areas which is not a forest, but rather a brushland. This is the most populated area in the priority landscape system, as it is home to 25 million people.
- **Trinity Forest Health and Fire Resilient Rural Communities** (FY23: **\$15.9 million**)
 - This is a 910,000 acre area in California which has a very high wildfire risk for homes and communities. This project focuses on fuel reduction and road reconstruction. This will attempt to reduce intensity of fires and allow easier evacuations in the event of fires.
- **Nez Perce-Clearwater-Lower Salmon** (FY23: **\$34 million**)
 - This is a 1.5 million acre area in Idaho. It is entirely within the tribal territory of the Nez Perce Native Americans. The project is overseen by the tribe and seeks to reduce hazardous fuels and restore important watersheds. The project seeks to protect communities and the timber industry.
- **Mount Hood Forest Health and Fire Resilient Communities** (FY23: **\$4.5 million**)
 - This area is 1,081,355 acres in northwest Oregon near Mount Hood. This area is heavily urban and is home to outdoor recreation facilities. This project seeks to work with nongovernmental partners to thin fire sheds and reduce the amount of flammable material in the eastern part of the district.
- **Klamath River Basin** (FY23: **\$35.4 million**)
 - This area includes 10 million acres across California and Oregon. This area specifically focuses on protecting fish populations including several listed species on the endangered species list. This project will protect both wildlife and rural communities within the basin.
- **Sierra and Elko Fronts** (FY23: **\$57.4 million**)
 - This is a 3.4 million acre area in both California and Nevada. This area is not contiguous but features similar topography and forest make up. The project seeks to reduce the exposure of communities to wildfire while also restoring native species and fire adapted forests.
- **Pine Valley** (FY23: **\$6.9 million**)
 - This is a 402,000 acre area in Utah. This project will involve wildfire treatment, especially in proximity to adjacent communities, by working to develop a fire adapted landscape.
- **Wasatch** (FY23: **\$12.25 million**)
 - This is a 1.1 million acre range in Utah. This project will use prescribed fire as well as developing and maintaining infrastructure to make this urban adjacent range more resilient.
- **Colville Northeast Washington Vision** (FY23: **\$2.16 million**)
 - This is a 1.6 million acre area in Washington state. This program will work to create fire adapted landscapes and expand on understandings of forest management in the area.

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In FY21, USFS made some structural changes to its budget. USFS established new Forest Service Operations (FSO) account that funds “certain fixed costs and administrative expenses related to facilities maintenance and leasing, information technology, and other agency-wide organizational services.” In addition to the new FSO account, USFS added a new line item for salaries and expenses in all its accounts including the FSO, Forest Rangeland Research (FRR), State and Private Forestry (SPF), National Forest System (NFS), and Wildland Fire Management (WFM).

USFS has also moved the Hazardous Fuels Reduction program several times. The program was originally funded under the WFM account and was moved to the NFS account in FY18. For FY23, USFS requested to move funding for the Hazardous Fuels program from the NFS account back to the WFM account. The FY2023 Omnibus appropriations did not support this change. In the FY2024 budget request, USFS proposed once again to move the Hazardous Fuels program will move from NFS to WFM.

Although these budget structural changes may improve congressional oversight, they also make tracking program-level

funding trends over time more challenging.

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TCS referenced a variety of sources in the creation of the textboxes contained in this report. These sources include, but are not limited to: federal and state agencies (e.g. USFS, EPA, California Department of Toxic Substance Control, California Department of Forestry and Fire Protection, California Public Utilities Commission), scientific journals (e.g. Proceedings of the National Academy of Sciences of the United States of America, Nature Sustainability), national and local press outlets (e.g. Helena Independent Record, New York Times, Courthouse News Service, Chico Enterprise-Record, Los Angeles Times, Napa Valley Register, KCRA, Gizmodo), the Congressional Research Service, and other organizations (e.g. Corelogic, ULI Developing Urban Resilience). Please contact the report authors for more information on specific resources used.

About Taxpayers for Common Sense

Taxpayers for Common Sense is a national budget watchdog and independent taxpayer advocate dedicated to increasing transparency and exposing wasteful and corrupt government spending. Founded in 1995 as a 501(c)(3) organization, TCS believes the federal government should operate efficiently and live within its means.

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